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World Financial Markets

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*International economic issues and priorities**

With the dollar strong in exchange markets, the new U.S. administration undoubtedly will focus mainly on domestic economic problems. The U.S. economy, after declining nearly 1% in 1980, is projected to show not much more than 1% growth in 1981. Productivity, which dipped both last year and this, will show scant improvement in the year ahead. Unemployment, now at 7.6%, may rise above 8% next year. The rise in consumer prices, which amounted to over 11% in 1979 and more than 13% this year, is likely to accelerate in the first half of 1981 and recede only modestly thereafter. The federal budget deficit, now estimated at $45 billion for calendar 1980, could be even greater in 1981 if there is large-scale tax-cutting. Measured from twelve months ago the money supply aggregates may not be far off target, but their recent behavior has caused great concern. Interest rates are at or above their peaks of last spring, and when relief comes rates are likely to remain relatively high if inflation expectations are not crushed.

To find a new combination of economic policies that promises progress in all these trouble spots will be a herculean task. While policy-makers will rightly put their major energies to the domestic challenge, they should not lose sight of some important international issues and the international implications of the domestic policies chosen.

Five issues head the list of international economic concerns: the U.S. balance of payments and the dollar's standing in exchange markets; the control of the Euro market, which some believe to be a major engine of inflation; the workings of the international monetary system; the heavy dependence of most countries on imported oil; and the international debt burden of the less-developed countries and the financing of their future balance-of-payments deficits. Of the five issues, the first three merit relatively low priority at the present time, while the last two demand urgent attention.

U.S. balance of payments

Despite repeated statements by many observers alleging continued weakness of the U.S. balance of payments, the overall position is actually quite strong and satisfactory. In 1980 the U.S. current account will be in approximate equilibrium, while those of all other

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Table 1

Projected current account balances

billions of dollars

	1980	1981
Industrial countries	—75	—80
United States	0	3
Canada	—3	—5
Japan	—12	—10
Western Europe	—60	—63
France	—8	—8
Germany	—16	—18
Italy	—12	—9
United Kingdom	5	5

industrial countries, except Britain and Norway, will show sizable deficits. The deficits of Germany and Japan are particularly striking, given their past large surpluses. As shown in Table 1, the U.S. balance-of-payments structure is not expected to change dramatically in 1981. Even with an assumption of oil prices averaging $40 per barrel, leaving an OPEC surplus in excess of $100 billion, the United States can expect a small surplus on current account in 1981.

Following recurring bouts of weakness over the past decade, the present strength of the U.S. international payments position is impressive, especially with the net U.S. oil import bill soaring from $3 billion ten years ago to $76 billion this year. Table 2 indicates that this massive increase in the oil bill has been offset through broad-based improvement in other current account transactions. There has been a $25 billion gain on net trade in agricultural and other raw materials, a $20 billion increase in the surplus on manufactures trade, and a $32 billion surge in net income from service transactions, principally through investment income earned on U.S.-owned assets and enterprises abroad.

Table 2

Trade and current account balances

billions of dollars; 1980 figures are estimates

	United States		Germany[a]		Japan[a]	
	1970	1980	1970	1980	1970	1980
Agricultural and raw materials	0.3	26	—6.8	—23	—8.2	—36
Fuels	—1.3	—73	—2.4	—34	—3.9	—67
Manufactures[b]	4.1	25	13.1	64	12.5	92
Trade balance						
Customs basis	2.5	—22	4.3	7	0.4	—10
Balance-of-payments basis	2.6	—29	5.6	12	4.0	1
Services	3.0	35	—2.2	—15	—1.8	—12
Transfers	—3.3	—6	—2.7	—13	—0.2	—1
Current account	2.3	0	0.7	—16	2.0	—12

[a] Product balances and customs trade balance value imports CIF

[b] For United States, includes reexports

By contrast, Germany and Japan are overwhelmingly dependent on net exports of manufactured goods to balance their international accounts. While each recorded enormous gains in their surpluses on manufactures, they were not enough to offset their oil bills and deficits in other areas. Their relative shortage of agricultural and natural resources has led to steadily increasing outlays for food and raw material imports. Neither country enjoys an external investment position comparable with that of the United States. Thus, Japan has few services exports to offset rising freight, insurance and travel payments. Germany's sharp invisibles deterioration has been exacerbated by tourist expenditures abroad, outflows of guest worker remittances, and interest payments on borrowings to finance the weakening external position.

Any perception of weakness in the U.S. payments position presumably relates to oil and to the adjustment problems of the manufacturing sector. With respect to oil, a start has been made in turning around the acute dependence of the U.S. economy on imported oil that developed in the first half of the 1970s. Net oil imports climbed from modest levels before 1970 to a peak of 9 million bpd in 1977, absorbing a major slice of OPEC production that played no small part in the sharp rise in relative oil prices. The belated introduction of more realistic oil pricing in the United States, assisted by sluggish economic growth, has trimmed net imports to 6.5 million bpd in 1980. They will likely fall lower yet in 1981 as full price decontrol is finally achieved. Since the United States has vast energy resources, the effects of high prices in stimulating domestic production, together with the equally vital price disincentive to wasteful consumption, offer the potential for a radical reduction in the oil import burden as the 1980s go forward. Few other industrial countries can match that prospect.

In evaluating the U.S. trade performance in manufactured goods it should be noted, first, that the greater surpluses of Germany and Japan are a necessary result of their more limited natural resources and foreign investment positions. Under floating exchange rates and relatively free trade, the principles of comparative advantage ensure that the United States does not achieve outsize trade surpluses on manufactured products. There is nonetheless a legitimate concern for U.S. industrial competitiveness. Even though relative price competitiveness of U.S. industry remains close to the 1973 level, the deep-seated productivity problems of U.S. industry have handicapped U.S. trade performance. Restoring technological dynamism to the domestic economy will pay dividends in the international sector also. More positive export policies would be helpful too, especially in fostering expansion of sales to developing countries that already take 40% of all U.S. exports.

Notwithstanding the present strength of the balance of payments, experience over the past decade has demonstrated the risk of neglecting the sensitivity of the dollar's exchange market standing to the effectiveness of U.S. economic management. In 1977 and 1978, the reflationary policies of the Carter Administration had the result of overexpanding U.S. import demand at a time when the world economy and U.S. export markets remained depressed. A widening current account deficit and the market's perception of lax and ineffective policies against inflation prompted the 1978 collapse of confidence in the dollar. Plainly, the United States cannot again play lone locomotive to the world. A legacy of that experience is a continuing uneasiness among OPEC and other international portfolio investors about the dollar as an investment currency, mitigated for the time being by high dollar interest rates. Diversification out of the dollar into less inflation-prone currencies would be quickly rekindled by any appearance in the new administration of inconsistency or passivity in fighting inflation.

Controlling the Euro market

Control or regulation of the Euro-currency market continues to be called for by those who regard the market's rapid growth as an important cause of inflation in both the United States and abroad. This contention has several pitfalls.

First, these views sometimes are based on the mistaken comparison of total Euro-currency liabilities ($1.3 trillion as of mid-1980) with the narrowly-defined domestic money supplies. This is like comparing apples and oranges. More than three quarters of the gross Euro liabilities are interbank deposits and most of the remainder consists of time deposits, whereas narrowly-defined domestic money supplies include only transactions balances held by nonbanks. For meaningful analysis, the focus should be on the Euro deposits of nonbanks and on comparable domestic monetary aggregates, such as M-3, which includes large-denomination time deposits and term repurchase agreements at banks.

Second, the views exaggerate the inflationary impact of the Euro markets. The amount of outstanding Euro-currency deposits held by nonbanks still is quite small in relation to domestic monetary aggregates. For example, Euro liabilities to nonbanks in mid-1980 were still less than 6½% of the combined broadly-defined domestic money

Table 3

Euro-currency liabilities

		To nonbanks only	
	Gross	*Total*	*U.S. residents*
In billions of dollars:			
Dec 69	85	25	n.a.
Dec 74	480	75	8
Dec 79	1,180	230	43
Jun 80	1,310	265	47
Average annual % change:			
1970-74	42	25	n.a.
1975-79	20	25	40
Jun 79 – Jun 80	31	32	26

supplies of industrial countries. Taking the Euro-dollar component alone, nonbank deposits were about $200 billion in mid-1980 and those held by U.S. nonbank residents were less than $50 billion, compared with the U.S. aggregate M-3, at $1.84 trillion. This fact undoubtedly helps to explain why numerous quantitative studies have failed to find that the growth of the Euro market could explain U.S. inflation or changes in the velocity of circulation of the U.S. domestic money supply.

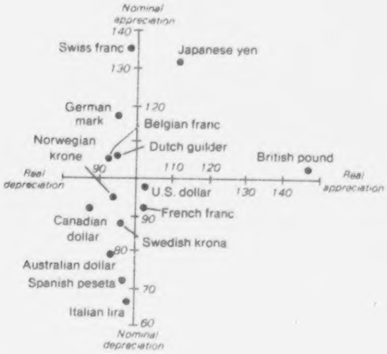
The real issue is that Euro-currency deposits held by nonbanks have grown more rapidly than comparable domestic monetary aggregates in the principal industrial countries — at an average annual rate of about 25% versus 15% per annum — over the past decade (see Table 3). While the rate of expansion of the Euro market has not accelerated during this period, there nevertheless is a possibility that the Euro market, given its competitive advantages over domestic banking markets, will continue to grow more rapidly than comparable domestic monetary aggregates.

There are at least two ways to deal with this possibility. One way is for the Federal Reserve and other national monetary authorities to take account of the more rapid expansion of the Euro market by tightening domestic monetary policy. Indeed, the Federal Reserve already includes *U.S.* nonbank resident holdings of Euro-dollar deposits in several of the monetary aggregates on which it focuses. The Fed may also want to take account of *foreign* nonbank holdings of Euro-dollar deposits insofar as such deposits could be used to purchase goods, services, and assets in the United States. Moreover, because interest rates in the Euro-dollar market are so closely linked to domestic interest rates, the Federal Reserve can directly influence Euro market growth by altering domestic money market rates.

Another way to handle any potential problems arising from the relatively rapid growth of the Euro market is to slow its expansion by reducing the market's attractiveness to depositors and borrowers. It is well to remember that, as with other markets such as the commercial paper market, the Euro-currency market itself is largely a product of controls and regulations on domestic banking systems, particularly of reserve requirements and restrictions on the payment of interest imposed by the Federal Reserve. Rather than attempting to slow the growth of the Euro market by extending the same controls and regulations to the Euro market — a course of action that would be fraught with difficulty and that would risk disrupting a very efficient market and distorting credit flows — it makes far more sense to eliminate, or at least minimize, the domestic regulatory burdens that give rise to the Euro market's rapid growth. This would reduce the competitive disadvantage now endured by the domestic banking market and help bring the Euro market's rate of expansion more in line with that of the domestic banking system. A step in this direction has already been taken by the Monetary Control Act of 1980, which reduced from less than 30 days to less than 14 days the term of deposits on which the payment of interest is prohibited, and which provides for a phased reduction of reserve requirements on domestic deposits. Further steps should be taken to phase out reserve requirements on time deposits altogether.

In the final analysis, it is important not to lose sight of the central fact that the growth of money and credit, whether in the Euro market or in other institutions and markets, *Nominal and real effective exchange rates: Dec 19, 1980*

Index, 1973-77=100



is ultimately a product of the amount of liquidity that U.S. and other monetary authorities provide via domestic monetary policy. The Euro market is not independent of domestic markets but is rather closely linked to them and, in effect, an extension of them.

The international monetary system

There is no urgent need to engage in further protracted negotiations on international monetary reform. The managed float and the evolution of the dollar-based system into a multiple currency reserve system are progressing satisfactorily. Exchange rate changes by and large have reflected fundamental market forces over the longer run: Countries with relatively low inflation rates and strong current account positions have experienced appreciation of their currencies, while those with high inflation rates and weak current account positions have seen their currencies depreciate (see chart).

At the same time, exchange rate changes have proven to be effective instruments for promoting balance-of-payments adjustment.There is ample evidence that changes in international competitive positions as expressed by real effective exchange rates — trade-weighted exchange rate changes adjusted for inflation rate differentials — have been important in altering the trade and current account positions of a number of industrial countries. Much of the narrowing of the U.S. current account deficit in 1974-75 and again in the past two years, for example, is attributable to the improvement in U.S. competitiveness resulting from earlier dollar depreciations. Similarly, the sharp turnaround of the current account positions of Germany and Japan, from large surpluses in 1977-78 to record deficits in 1979-80, is in part the result of the appreciations of the mark and the yen during 1977-78.

Flexible exchange rates have also proven compatible with a rapid expansion of international trade and capital flows, contrary to the numerous concerns that had been voiced prior to the advent of floating rates. In fact, during the period in which the floating rate system has been in operation, U.S. capital controls were dismantled and exchange controls in a number of other industrial countries were significantly liberalized.

The international monetary system has been evolving gradually toward a multiple currency reserve system. The dollar's share of the world's total foreign exchange reserves (including ECUs) has declined from 85% in 1973 to about 65% at present, while that of other currencies — especially the mark, and to a lesser extent, the yen and Swiss franc — has been rising in recent years. Whereas the dollar at one time was almost the sole currency used for intervention purposes, intervention in other currencies is increasing now, especially in Europe with the establishment of the EMS.

This development is both desirable and welcome. The relative importance of the U.S. economy has lessened over the years, such that it accounts for barely one third of industrial-country output today, compared with one half ten years ago. During the same period, the relative importance of the U.S. capital market has also diminished. Portfolio diversification is likely to continue, given the changing patterns of international trade and finance, the volatility of exchange rates, and the differences of investment performances of assets in various currencies over the years. In particular, the buildup of a large OPEC current account surplus will remain a key element in the diversification process. Recognition of the legitimate need for portfolio diversification has given rise to a more relaxed attitude by officials in Germany, Switzerland, and Japan toward their currencies being used as reserve assets.

Concerns continue to be voiced in various official quarters that such a system is inherently unstable. It is asserted that shifts in currency preferences by central banks will exacerbate exchange rate fluctuations arising from private capital movements. However, these fluctuations mainly stem from changes in fundamental factors such as current account balances, inflation differentials, and interest rate differentials, as well as from political disturbances. Exchange rate volatility thus often serves the desirable function of nudging governments toward more realistic policies. Moreover, any risks of exchange rate instability arising from shifts in currency preferences can be minimized by bringing a measure of order to the process of reserve diversification through special placements of government securities with foreign official institutions involving off-market foreign exchange transactions.

Since the early 1970s there have been several attempts to involve the International Monetary Fund in issues relating to exchange rate and international reserve management. In the area of exchange rate management, the role of the IMF was diminished substantially following the abandonment of the par value system. Subsequent efforts to involve the Fund more broadly in the exchange rate management of member countries through IMF "surveillance" under Article IV provisions have not had much impact, since the member countries are under no obligation to alter their policies. The principal obstacle continues to be the reluctance of member countries to surrender their sovereignty over domestic economic policies.

In the area of international reserve management, the stated goal of international monetary reform is to enhance the role of the SDR as the principal reserve asset of the international monetary system. Since the advent of flexible exchange rates, however, the proportion of international reserves held as SDRs has actually declined.

Part of the reason that the SDR has not gotten off the ground is that it has been an unattractive asset to hold in comparison with other reserve currencies. The recent decision to redefine the SDR in terms of five key currencies (the dollar, mark, yen, sterling, and French franc) should make it a more attractive unit than in the past, but not necessarily the most desirable unit for many countries. Any specific combination of currencies may not accord well with the interests of individual portfolio holders in relation to their import patterns and debt service obligations. The fact that the interest rate on the SDR still is equivalent to only 80% of the weighted average of rates in the five major financial centers has also made it a less desirable asset to hold. Even if a "full value" SDR were eventually adopted, there are a number of factors that make it a more illiquid asset than currencies, thereby limiting its usefulness in private transactions.

Apart from these technical problems there is a more basic, gnawing issue of what role the SDR is expected to play in a world of flexible exchange rates and multiple reserve currencies. As originally conceived, the SDR was to provide a means for improving control over the growth of international liquidity, while reducing dependence on the dollar as a reserve currency. If anything, however, SDR creation has added to world liquidity, since the

IMF has no power to control the growth of reserve currencies. Thus, unless the Fund is to become the central bank of an integrated monetary system, in which national governments surrender their sovereignty over domestic economic policy and the SDR is the sole international currency, one of its principal purposes is likely to be unattainable.

Serious doubts about the desirability of pushing the role of the SDR extend to the proposal to create a substitution account. Foreign central banks would place reserve currencies (mainly dollars) in an account *administered* by the IMF in exchange for claims denominated in SDRs. This proposal was developed to enhance the SDR and to promote greater exchange rate stability, but it was rejected at the Interim Committee meeting in Hamburg last spring. The attractiveness of the proposal to prospective depositors in the account was its apparent promise of greater yield on their reserve holdings. However, without additional contributions from the U.S. taxpayers in the event of either interest or capital value deficiencies, such promise was illusory.

Even ardent supporters now acknowledge that it was extremely complex and politically unattractive and did not address the more pressing issues of today, such as balance-of-payments financing. Some have favored reviving the proposal by creating a simpler account that would be an integral part of the IMF in which exchange rate gains or losses presumably would be shared between the United States and the rest of the Fund's members. However, unless depositors are assured of a higher yield, the account would be unattractive to them. Moreover, it is unlikely that the developing countries would participate if they, too, were held accountable for any interest rate or exchange rate losses. Others have sought to rekindle interest by creating a substitution-recycling mechanism in which the Fund would borrow dollars from OPEC and relend the proceeds in SDRs to many non-oil developing countries. Although this proposal has some resemblance to the original, its basic purpose would be entirely different. It would provide the Fund with additional financial resources, but would not deal satisfactorily with the issue of reserve diversification.

Rather than striving for international monetary reform, a better approach is to leave the evolution of the international monetary system to the market place. To the extent that there are legitimate concerns about the need for orderly reserve diversification, appropriate "defensive measures" can better be worked out through intensive consultation among the reserve-center countries. The establishment of credit facilities among the EMS participants represents a step in this direction. The entire G-10 consultative framework could also usefully be strengthened in managing the exchange rate system. The IMF would then be free to concentrate its efforts on providing balance-of-payments financing to the non-oil LDCs.

Reducing dependence on imported oil

Recent conservation efforts notwithstanding, the world remains heavily dependent on imported oil, particularly from the Middle East. Unless future increases in relative oil prices can be contained, it will be difficult to achieve a lasting solution to the problems of growth, inflation, and balance-of-payments financing that now confront the United States and the world economy in general.

During the early part of the 1970s the pressure on oil prices came

Table 4

OPEC terms of trade

period averages as index numbers, 1974=100

	Oil prices[a]	*Import prices*[b]	*Terms of trade*
1974	100	100	100
1975	98	111	89
1976	106	107	99
1977	114	117	97
1978	117	136	86
Dec	117	144	81
1979	178	154	116
Dec	255	164	155
1980	286	175	163
Dec	306	184	166
1981 (proj)	360	195	184

[a] OPEC marker crude through December 1978 and effective OPEC average price thereafter. The effective price is equal to the weighted average of all official OPEC prices and spot market-related prices. The weights used are the OPEC members' production levels.

[b] Wholesale prices of non-food manufactures in 12 industrial countries, in *dollar terms*, weighted by these countries' share in OPEC merchandise imports.

Table 5

Trends in oil consumption in major industrial countries in 1979 and 1980

% change from same period a year ago

	1979	*1980 to date*[a]
United States	—1.8	—8.9
Japan	1.0	—7.0
Total EEC	1.3	—8.6
France	—0.7	—8.4
Germany	2.9	—8.0
Italy	1.4	2.6
United Kingdom	0.1	—13.6
Netherlands	2.5	—6.4
Belgium	1.3	—12.5
Denmark	0.4	—17.9

[a] Data are for January-August except those for the United States and Germany, which are for January-September, and those for Japan, January-July

mainly from the *demand* side, reflecting more than two decades of falling relative oil prices. Even after the 1973-74 quadrupling of oil prices many industrial countries, particularly the United States, failed to adjust effectively so that demand continued to be the major influence on oil prices. However, rising oil production from new areas (primarily the North Sea, Mexico, and Alaska) kept the rate of oil price increases in nominal terms quite moderate during 1974-78. In fact, they declined by 20% in real terms (see Table 4). It was not until the second shock in the wake of the 1979 Iranian revolution, which resulted in a doubling of relative oil prices, that a more fundamental adjustment in oil demand took place. During 1979, the aggregate oil consumption of the major industrial countries remained flat, and this year it has been reduced by about 7%. This development, which is not solely explained by the slowdown in economic growth, has not been limited to the United States (see Table 5).

Oil prices have continued to rise, nevertheless, and may again be on the verge of another surge because of pressures from the *supply* side. Since 1979, political events in the Middle East and a growing desire on the part of most oil producers to conserve their oil resources have reduced the availability of oil supplies, both actual and expected. For example, the level of OPEC production now considered most likely for the decade ahead is some 10 million bpd less than what was expected for the same period only five years ago. This has more or less offset the decline in oil consumption to date and has kept the pressure on oil prices.

The reduction in oil supplies has also changed the consumers' perception of what constitutes an adequate level of oil stocks, and their willingness to share them at times of emergency. The more or less persistent tightness of oil markets because of the fear of inadequate supplies also has meant that the role of OPEC in the setting of oil prices has been overtaken by market forces. Since 1979 official prices, as set by OPEC, have followed rather than led those established by the market.

The prospects for an improvement in the current oil supply situation are not favorable. Oil supply disruptions due to political factors are likely to continue. The number and complexity of the conflicts that still remain unresolved in the Middle East alone, and the continued dependence of the world on that area as a source of oil, suggest that even with falling demand the path of future rises in relative oil prices will probably continue to be one of abrupt jumps.

The level of the non-Communist world's dependence on the Middle East as a source of energy remains high, in spite of the declines in oil consumption and increased oil production outside this area (see Table 6). This year, the oil producers on the Gulf are likely to supply nearly one fifth of the total energy consumed by non-Communist countries. Although this proportion is smaller than the peak of 25% reached in the mid-1970s, it is still higher than it was as recently as 1970. Moreover, Western dependence on the Middle East has become even more concentrated on a few countries, particularly Saudi Arabia. Having raised its production to 9.5 million bpd during most of 1979-80 to make up for the Iranian shortfall and now to over 10 million bpd to make up for the Iraq-Iran war, Saudi Arabia is likely to account for over 21% of the non-Communist world's oil production this year, compared with 16% in 1973 and only 10% in 1970. In terms of total energy consumed by the Western world, Saudi Arabia's contribution in 1980 will exceed 10% versus 5% in 1970.

It is clear that continued reliance on Saudi Arabia to make up for the loss of oil supplies elsewhere is not a long-term solution to the world's energy problems. It creates new pressures as it forces one country to maintain oil production at levels far above those needed to meet its own financial requirements. This results in a concentration not only of world oil production but also of the financial surplus. This year, for example, Saudi Arabia is likely to account for 40% of the aggregate OPEC current account surplus. While a high level of production by Saudi Arabia makes at present a significant contribution to the stabilization of oil prices, it should be viewed only as a temporary measure, which needs to be supplemented by further action on the part of the oil-importing countries, particularly the industrialized world. The thrust of this action should be on the development and implementation of comprehensive energy policies that will reduce dependence on imported oil, and thus the vulnerability of their economies to bouts of sharp increases in relative oil prices.

With respect to the measures that need to be implemented a distinction should be made between the immediate situation of the oil supply disruption stemming from the Iraq-Iran war and the longer-term problems for the decade ahead.

In the short term, prompt action is needed on the part of oil-importing countries to prevent a repetition of the events of late 1979, when the scrambling for oil supplies led to sharp increases in oil prices even though oil production by that time was more than adequate to meet demand. At present, oil consumption is falling, most Gulf countries have raised oil production, Iraq and Iran have resumed a limited volume of oil exports, and the Western world's oil stocks are at an historically high level. If drawn and shared effectively these stocks are adequate to offset the shortfall well into 1981.

The EEC and the International Energy Agency (IEA) have agreed on the need for measures to encourage the use of stocks and the sharing of oil supplies among countries. It is now up to the member governments to implement these policies quickly and effectively, and to help prevent the further buildup of pressures in the oil market. Effective implementation will require that those countries and companies which have excess oil supplies pass on some of them to the countries and companies most affected by the war, including countries which are not members of either the EEC or the IEA.

With successful cooperation in the sharing of oil supplies among oil-importing countries and the continued willingness of some oil-exporting countries to maintain high production, the average effective oil price (that is the weighted average of official and spot-related prices) for the whole of next year could be kept to around $40 per barrel. Failure to do so could drive up prices well beyond this level, and the economic implications would be disastrous. Even with an average price of around $40 next year the economic outlook is bleak. This price represents an increase of 25% in nominal terms and of over 12% in real terms, a rate substantially higher than that indicated by the long-term pricing formula recently proposed by OPEC. It implies no significant decline in the OPEC surplus from the 1980 level of over $100 billion, a real growth rate in the industrial countries of less than 1%, and inflation of around

Table 6

The pattern of non-Communist world energy consumption, 1950-79

	1950	1970	1973	1976	1979
Percent of total energy supplied by:					
Non-oil sources	66	49	46	47	48
Natural gas	10	19	19	19	18
Coal	50	23	19	19	20
Nuclear energy	—	½	1	2	3
Water power	7	7	7	7	7
Oil	34	51	54	53	52
from the Middle East	6	18	24	25	22
of which: Saudi Arabia	2	5	9	10	10
from the rest of OPEC	5	13	12	11	10
from non-OPEC LDCs	1	3	3	4	5
from the industrial countries	22	17	16	14	15

	1951-73	1974-78	1979
Average annual growth rates, in percent:			
Total energy consumption	4.7	1.6	2.0
Non-oil energy consumption	3.0	2.2	4.0
Oil consumption	6.7	1.2	0.2

Note: Percentages may not sum to 100 because of rounding.

10% by year-end. In this environment, the projected 1981 current account deficit of the non-OPEC developing countries could widen to over $80 billion. A higher oil price, in the $45 to $50 range, of course, would greatly exacerbate these problems.

Even if the disruption caused by the Iraq-Iran war is managed successfully and another large increase in relative oil prices is averted in the near term, there would still be a need for a crash energy program. While restraints on demand and the sharing of oil stocks have already been recognized as useful measures, stronger action is still needed on the supply side of energy in order to effectively contain the increase in relative oil prices in the decade ahead. This applies particularly to the United States. It is the largest consumer and importer of oil in the world, and also has vast energy resources that could make a substantial contribution to increasing world energy supplies.

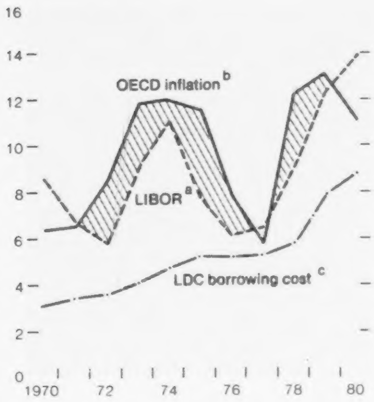
The first aim of government policy should be to stimulate oil exploration and encourage higher rates of oil production in parts of the world outside the Middle East, not only the United States, but also Canada, the North Sea, Mexico and the developing countries. Recent fiscal proposals made by Canada and the United Kingdom are not constructive, as their effect may be to curtail oil exploration and production.

The second objective of government policy should be to bring about a quick and significant reduction in the proportion of total energy that is now supplied by oil. During the last few years, despite the large increase in oil prices, only slight progress has been made in increasing the share of non-oil sources in the total energy consumed by the non-Communist world (see Table 6). To raise that ratio in the decade ahead a broad range of policies will be required that will encourage development and use of all types of energy, such as natural gas, coal, nuclear power, and synthetic fuels. While it is true that it will take some time for a substantial increase in non-oil supplies to materialize, the expectation of an increase that a strong energy program will generate could have a positive influence on the production policies of oil-exporting countries and the stock policies of the oil-importing ones. This, in turn, could have a beneficial impact on oil prices.

The external debt burden of the LDCs and recycling

The second oil shock is hitting the developing countries harder than the first. Financing their balance-of-payments deficits will be more difficult this time and is going to require innovative institutional thinking and initiative.

Inflation and interest rates
percent per annum



a) six-month deposit rate, annual average
b) GDP deflator in dollar terms; two-year moving average at annual rate
c) interest payments by group of twelve major non-oil LDCs as percent of external debt outstanding at mid-year

Adjustment to the 1973-74 oil price increases went relatively smoothly. By 1975, the low point of the industrial-country recession, the current account deficit of twelve major non-oil developing countries that are significant borrowers in international capital markets had soared to $16 billion. This constituted 4.2% of their GDP, up from 1.6% in the first years of the decade. However, in the 1976-78 period many LDCs were able to restore their current account positions to the modest deficit levels of the early 1970s.

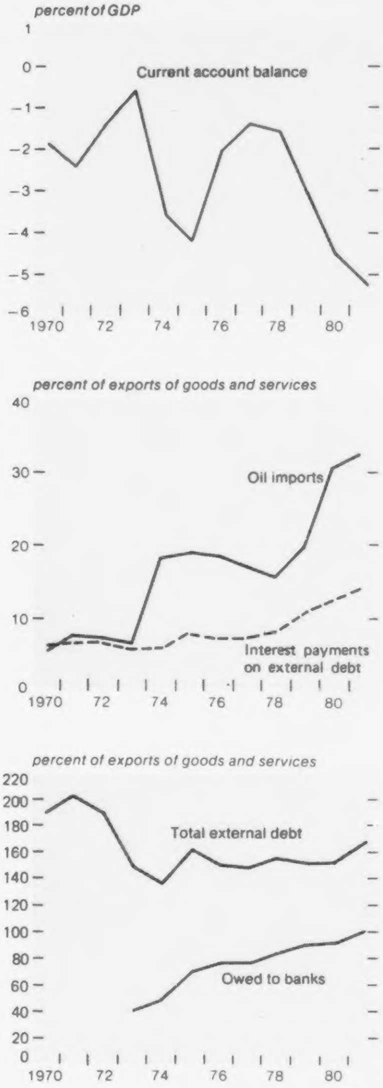
Four key developments made possible this successful adjustment. First, as noted earlier, the relative price of oil declined by more than 20%, contributing to the virtual elimination of the OPEC surplus. Second, led by the United States, the industrial economies pulled out of recession and their import demand for developing-country products revived. Third, many LDCs — notably in Asia — undertook stringent austerity programs or were successful in building up industrial-country demand for the products of their infant manufacturing industries. Fourth, during the adjustment phase international banks were able to extend greatly increased credit to many LDC borrowers without incurring excessive concentrations of country credit risks and without undue strain on their own capital positions. IMF oil facilities provided another temporary source of finance to the deficit countries.

Looking into 1981 and beyond, the environment for smooth adjustment and financing of LDC deficits looks much less promising. First, at $40 per barrel the oil bill of the twelve major non-oil LDCs will reach nearly one third of their export earnings. The rise in oil prices since 1978 is taking an additional 17% bite from their export revenues, compared with the 12% exacted during the first oil shock (see chart). This time there is little expectation of a sustained decline in relative oil prices. On the contrary, most observers foresee a rising trend and do not project a significant decline of the OPEC surplus. Second, the United States is no longer in a position to lead the world out of recession by pumping up its own economy. The gloomy economic prospects for industrial countries bode ill for LDC exports and their terms of trade. Third, some developing countries were tardy in adjusting to the first oil shock. Even by 1978 their adjustment was less than complete, and thus they have entered the new adjustment round in a weakened financial condition.

Fourth, the end of cheap energy now is joined by the end of cheap money, compounding the real adjustment burden on the borrowing countries — a significant difference from the situation of the mid-1970s. During much of the past decade dollar interest rates fell short of most indicators of U.S. or world inflation. That is, interest rates were negative in real terms. Borrowed money was cheap money and that low price played no small part in the inflation process. U.S. recognition of that link, together with the adoption of monetary policies that tend to bring about interest rates that are positive in real terms, has been a necessary step in coming to grips with entrenched inflation.

High nominal interest rates, especially their conjunction with strongly positive interest rates in real terms, have serious implications for LDC financing. Ten years ago the twelve major non-oil LDCs paid interest of just $1.1 billion on their external debt. This was less than 6% of their export earnings and represented an average interest rate of just 3.2% (see chart). This year their interest payments will

Current account and external debt of major LDC borrowers [a]
1980 and 1981 data are projections



[a] Argentina, Bolivia, Brazil, Chile, Colombia, India, Korea, Philippines, Taiwan, Thailand, Ivory Coast and Turkey

reach $16 billion, an average interest rate of just under 9% that will absorb 16% of their export earnings — a fraction which could jump to 20% in 1981. This rise in the interest burden of the group has occurred even though there has been no increase in the ratio of these countries' aggregate foreign debt to their export earnings. Instead, the rising share of export revenues dedicated to interest payments is traceable almost entirely to the run up in dollar interest rates over the period, together with some rise of interest costs as these countries increased their reliance on private market finance relative to non-commercial sources.

It is often asserted that inflation benefits debtors by eroding the real value of their outstanding debt. This is true, but is nevertheless an incomplete view of the effects of inflation on borrowing countries. By recouping for the lender the losses in real value of principal, high nominal interest rates can deprive the borrower of real benefit from inflation. This indeed is the meaning of the shift to positive real interest rates.

The sum of current account deficits and amortization of outstanding long-term debt less the funds provided LDCs through direct investment receipts and official financing provides a measure of their gross commercial borrowing requirements from the private international markets (GCBR). The chart shows this borrowing in relation to export earnings for the group of twelve non-oil LDCs. The upward trend of this ratio since the first oil crisis — partly the result of inflation — is a powerful indicator of the growing vulnerability of these countries to cash-flow problems and highlights their dependence on the confidence of financial markets. In net terms their borrowing demand is of course much less, but nonetheless taxes the capacities of private financial institutions. From 1973 through mid-1980 bank claims on the twelve LDCs spiralled more than six-fold, to a total just short of $100 billion. That growth has far outpaced the growth of the private banks' capital, a trend they will resist in the future.

One way that the burden on the LDCs can be alleviated is by curbing U.S. inflation through an effective program. This program must be broadly based and avoid the pitfalls of a one-sided monetarist approach as is apparent from the experience of the United Kingdom. The British have not in practice curbed their public-sector deficit, in part from failure to contain public-sector wages. Instead they have counted mainly on a restrictive monetary policy, but at enormous cost to the real economy and with slow progress in bringing down inflation. British interest rate policy, of course, mainly affects the British economy. In meeting its world responsibilities, the United States cannot afford excessive reliance on monetary policies alone to fight inflation.

The limited ability of private banks to intermediate the recycling of the OPEC surplus to deficit countries, especially the LDCs, calls for more active participation of OPEC. At the moment, OPEC's involvement in lending to developing countries is too modest. Even after the first oil shock, it made a significant contribution by providing funds for the two IMF oil facilities and the Supplementary Financing Facility (SFF). At that time, the OPEC current account surplus was only about half of its current magnitude and the prospects for reductions in the surplus were much greater than they are today. Clearly, the time is ripe for OPEC members to assume a more significant share of the recycling function, if not through the IMF, then through other entities. OPEC members may prefer the intermediation through their own institutions, which could be significantly enlarged. Lending through these institutions could be done jointly with commercial banks.

Finally, there has to be some basic rethinking of the future role of the International Monetary Fund. As was noted earlier, attempts to increase the Fund's involvement in the area of exchange rate and international reserve management have produced few tangible results. These issues can be dealt with more effectively among the reserve currency countries. This would free the IMF to become more directly involved in providing balance-of-payments support to the non-oil LDCs.

Increased IMF lending to developing countries represents a significant departure from past lending practices of the Fund. The industrial countries traditionally have been the principal "users" of the IMF resources, accounting for about two thirds of all drawings since 1947. It has not been until the past year or so that the developing countries have become the principal users of Fund resources.

While conditionality must remain a central element of IMF lending in order to promote balance-of-payments adjustment, it is important that the policy recommendations attached to, and the size of, the various IMF facilities be adapted to ensure prompter and greater usage of the Fund's resources by the member countries. Recent decisions to increase the access of member countries to the Fund's resources and to lengthen the terms of IMF programs under the Extended Facility are steps in the right direction. But, it is also essential for the Fund's staff to become more actively involved in advising countries on an ongoing basis, rather than only at the time in which standby arrangements are negotiated, if Fund relations with a number of countries are to be improved. Maintaining a much larger IMF staff permanently in the various locales undoubtedly would help in this regard.

Increased concentration of the IMF on the problems and funding of the developing countries would bring it much closer to the World Bank. The traditional separation of responsibilities between the Fund and the Bank along program versus project finance lines could become blurred as the Fund places greater emphasis on structural or supply-side factors and the provision of longer-term assistance to these countries. Closer ties between the international financial institutions may represent a realistic response to one of the most pressing problems of the decade — the economic development and financing of the LDCs.

The financial structure of the Fund also requires much closer scrutiny. The entire structure of the Fund — both on the lending side and on the subscription side — was originally based on the quota system, which also determined the voting shares of member countries. On the lending side, the relationship between quotas and borrowing limits for member countries has been relaxed considerably in the past few years. On the Fund's liability side, the importance of quota subscriptions has lessened over the years with the need for the Fund to acquire substantial resources from direct borrowing. Yet, voting arrangements continue to be based solely on quota subscriptions, irrespective of the total resources supplied by member countries. A more flexible approach in determining voting arrangements may be desirable.

This raises the broader issue of whether, as presently constituted, the IMF can be effective in dealing with the financial problems of the 1980s and beyond. Its charter was formulated to tackle an entirely different set of problems from those facing the world today and in the future. The United States, as one of the principal architects of the Bretton Woods system and traditionally the largest contributor to the IMF, has a particular responsibility to ensure that it remains a viable and effective institution. Creation of a special U.S. task force to review the Bretton Woods charter would help to clarify U.S. government objectives about what role the Fund ought to play and the way in which these objectives can best be achieved.

Statistical appendix

for key to data in tables
see the September 1980 issue
of World Financial Markets

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Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

Effective exchange rates

Index numbers, March 1973=100. The index of the effective exchange rate for a currency is a measure of that currency's trade-weighted average appreciation or depreciation vis-à-vis the currencies of 15 other major countries. The exchange rates used in the construction of this index are the averages of daily noon spot exchange rates in New York for months and for weeks ending on dates shown. The trade weights used are based on 1976 bilateral trade in manufactures.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
pre-June 1970 parities	118.5	94.9	79.3	116.2	91.6	97.5	110.9	95.9	98.2	88.3	97.8	97.9	98.1	102.2	92.2	98.4
Smithsonian central rates	107.0	101.3	88.7	116.0	95.4	96.1	108.3	97.0	99.1	91.6	98.0	96.0	96.3	100.5	91.7	98.1
1979																
December	98.7	84.0	103.5	73.9	140.2	91.2	54.4	110.4	119.4	167.5	121.5	94.6	101.3	88.1	74.2	75.3
1980																
January	97.9	84.3	104.2	75.6	139.9	91.0	54.4	110.4	119.4	166.6	121.6	93.5	101.8	87.9	73.9	75.2
February	98.4	85.0	101.7	77.2	139.3	90.5	54.6	110.0	119.1	163.4	121.7	92.9	103.2	88.0	74.2	75.3
March	101.3	84.3	101.9	77.4	137.8	90.2	53.9	109.6	118.7	159.1	121.4	91.7	104.2	88.2	75.1	75.5
April	102.3	83.4	101.6	78.2	137.1	90.3	53.4	109.9	118.1	161.1	121.0	91.2	104.6	88.4	75.5	73.3
May	98.4	83.6	109.4	78.6	138.1	90.3	53.3	110.6	118.2	163.7	121.4	91.5	103.5	88.1	74.8	71.5
June	96.2	84.9	113.8	78.7	137.9	90.6	53.1	110.8	118.6	164.3	121.7	92.0	103.0	87.8	74.8	71.4
July	96.0	84.8	111.7	79.3	138.2	91.1	52.7	110.9	119.1	165.5	122.2	92.5	102.8	87.8	75.1	70.0
August	97.2	84.5	111.1	80.5	137.2	90.7	52.7	110.2	119.0	163.8	122.0	91.8	103.3	88.2	75.7	69.6
September	96.4	83.9	115.8	81.4	137.0	90.4	52.4	109.9	119.1	164.7	121.8	91.4	103.3	88.2	75.4	68.4
October	96.8	83.6	119.4	83.2	135.4	89.9	52.0	109.1	118.3	165.5	121.0	90.5	103.2	88.7	75.4	68.3
November	98.9	82.7	118.8	84.9	134.2	89.0	51.7	108.3	117.7	164.5	119.9	89.5	103.6	89.0	76.1	68.6
7	98.8	82.8	119.5	86.7	133.4	88.9	51.7	107.8	117.2	163.9	119.9	88.7	103.8	89.1	76.0	69.4
14	98.4	82.8	119.2	84.8	134.8	89.3	51.6	108.0	117.4	165.0	119.7	89.3	103.2	89.0	75.9	68.7
21	99.0	82.7	118.8	84.4	134.6	89.1	51.6	108.3	117.7	164.6	120.0	89.7	103.6	89.0	76.2	68.3
28	99.4	82.6	118.0	83.6	134.7	89.1	51.6	108.4	117.9	164.6	120.3	89.9	103.7	89.1	76.5	67.7
December 5	99.8	82.4	118.9	84.0	134.2	88.9	51.5	108.2	117.8	163.9	120.0	89.7	103.2	88.9	76.6	68.2
12	99.6	82.1	122.4	84.9	133.2	88.6	51.6	107.6	116.8	162.1	119.5	89.1	102.7	89.0	76.7	68.1
19	100.5	81.7	122.8	84.8	133.8	88.5	51.3	107.7	116.9	161.9	119.5	88.7	102.9	88.8	76.6	67.4

Real effective exchange rates

Index numbers, March 1973=100. The index of the real effective exchange rate is the index of the effective exchange rate adjusted for inflation differentials which are measured by wholesale prices of nonfood manufactures. Exchange rates and trade weights used in the construction of this index are the same as those used for effective exchange rate indices. Annual figures are averages of months.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
1976	100.3	106.7	88.3	96.7	101.0	100.1	92.7	98.0	101.9	111.0	106.2	96.2	99.1	109.1	101.8	105.2
1977	100.0	99.8	93.5	101.6	102.4	96.2	95.6	99.8	103.9	105.3	109.3	97.4	99.9	105.1	91.9	100.8
1978	95.5	92.9	107.2	106.4	103.0	96.8	73.9	99.7	103.8	121.8	109.4	103.6	95.6	96.6	87.3	97.0
1979	95.5	92.9	96.1	118.7	103.8	98.8	93.7	97.2	100.4	115.6	108.2	101.8	90.5	99.3	86.1	109.2
1979																
December	96.6	92.9	86.9	123.4	105.1	100.6	95.3	95.6	98.7	112.8	109.5	97.1	89.1	100.5	86.3	107.6
1980																
January	95.5	94.8	87.0	128.3	104.1	99.4	96.2	94.7	99.9	110.0	109.4	95.6	89.2	100.3	85.4	112.0
February	96.6	94.6	85.3	131.6	103.1	99.4	96.9	93.9	99.2	106.9	109.1	94.7	92.5	100.9	86.9	112.0
March	100.1	92.1	86.4	132.7	101.6	99.9	95.5	92.8	98.4	103.7	109.1	94.1	93.1	101.3	87.4	111.2
April	101.7	90.4	86.9	134.1	101.0	99.9	95.1	92.7	96.4	104.6	108.0	93.4	93.1	100.7	87.0	107.1
May	97.8	90.3	94.0	135.7	101.7	99.9	95.9	93.3	96.9	105.9	109.0	94.1	92.7	100.4	86.0	104.6
June	95.7	91.7	97.7	137.1	101.4	100.0	96.0	93.2	96.8	105.6	109.4	94.2	91.6	100.2	85.9	105.6
July	95.8	91.6	95.1	138.2	101.1	100.8	95.9	92.7	97.7	105.8	110.1	95.9	91.9	100.0	86.8	104.1
August	96.8	91.5	94.7	140.4	100.2	101.1	96.0	91.5	97.7	104.0	109.7	95.6	91.7	100.6	88.2	104.1
September	95.2	91.8	98.5	141.9	99.5	100.9	96.3	92.5	97.3	104.3	109.3	94.0	92.6	100.7	88.4	103.1
October	96.6	91.4	99.8	144.2	98.0	100.9	95.7	91.8	96.5	103.9	107.4	94.4	92.9	101.1	88.8	103.3
November	98.5	90.6	99.6	146.7	96.9	100.3	95.5	90.5	95.9	103.8	107.4	93.8	93.3	101.4	90.2	104.3

Euro-currency market size

based on foreign-currency liabilities and claims of banks in major European countries, the Bahamas, Bahrain, Cayman Islands, Panama, Canada, Japan, Hong Kong, and Singapore
billions of dollars (rounded to nearest $5 billion), at end of period

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	
										Mar	Jun[r]
Estimated size											
Gross	150	205	310	390	480	590	725	925	1 185	1 230	1 310
Liabilities to nonbanks	30	35	55	75	80	100	125	170	230	250	265
Liabilities to central banks	15	25	40	60	70	85	110	120	155	155	160
Liabilities to other banks[a]	105	145	215	255	330	405	490	635	800	825	885
Net	85	110	160	215	250	310	380	485	600	625	670
Claims on nonbanks	35	45	65	100	115	150	195	245	295	305	340
Claims on central banks and on banks outside market area[b]	35	45	75	95	115	135	155	195	245	260	260
Conversions of Euro funds into domestic currencies by banks in market area[c]	15	20	20	20	20	25	30	45	60	60	70
Euro-dollars as % of gross liabilities in all Euro-currencies	76	78	73	77	78	79	76	74	72	73	72

[a] includes unallocated liabilities
[b] includes unallocated claims
[c] in European market area only
[r] revised
[p] preliminary

Euro-currency deposit rates

prime banks' bid rates in London, at or near end of month

	1977	1978	1979	1980							
	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Euro-dollar:											
overnight	7.12	10.62	14.00	12.25	9.37	9.50	9.12	10.50	12.50	13.25	18.50
7-day fixed	6.31	10.62	14.00	12.75	9.50	9.50	9.25	10.62	12.50	13.50	18.50
one month	6.87	11.00	14.37	14.25	9.87	9.50	9.50	11.19	13.19	14.50	18.37
three months	7.19	11.69	14.44	14.37	10.12	9.75	9.81	12.25	13.81	15.37	18.06
six months	7.50	12.31	14.44	13.69	10.25	9.94	10.06	12.50	13.94	14.87	16.87
twelve months	7.67	12.00	12.87	12.75	10.25	9.87	10.19	12.50	13.69	14.12	15.50
Euro-mark:											
one month	2.19	3.19	8.50	9.06	9.37	9.50	8.69	8.62	8.87	8.81	9.69
three months	2.50	3.31	8.56	9.06	9.37	9.37	8.25	8.50	8.87	8.94	9.56
six months	2.81	3.69	8.56	9.00	9.00	8.81	7.81	8.31	8.87	8.81	9.31
twelve months	3.06	3.81	8.12	8.69	8.50	8.19	7.75	8.12	8.69	8.56	9.37
Euro-Swiss franc:											
one month	1.31	—.06	5.19	5.25	5.56	5.62	5.06	6.00	5.25	4.12	6.12
three months	1.37	0.00	5.75	6.12	5.37	5.69	5.12	5.87	5.75	5.44	6.12
six months	1.87	0.12	5.87	6.25	5.37	5.69	5.25	5.75	5.75	5.12	6.12
twelve months	2.25	0.62	5.56	5.62	5.25	5.12	5.00	5.50	5.62	5.27	6.19
Euro-sterling:											
one month	6.50	12.00	16.75	17.25	17.00	17.37	16.87	16.75	16.25	17.00	14.50
three months	6.62	12.62	16.75	17.25	16.75	16.75	15.62	16.62	15.87	16.75	14.62
six months	7.12	13.25	16.75	16.37	16.12	15.25	14.25	16.25	15.00	16.12	14.44
twelve months	7.37	13.00	15.25	15.37	14.75	14.00	13.25	15.12	14.37	15.00	14.00
Euro-French franc:											
one month	12.25	10.50	13.87	12.50	12.31	12.25	12.37	12.00	11.62	11.00	10.50
three months	13.25	9.87	14.00	12.75	12.50	12.25	12.12	12.12	12.06	11.31	11.37
six months	14.00	9.87	14.12	12.87	12.62	12.25	12.00	12.37	12.56	12.00	12.37
twelve months	13.25	10.25	13.75	13.00	12.75	12.25	11.94	12.62	12.81	12.62	13.00
Euro-yen:											
one month	0.62	—.69	7.62	11.50	12.62	13.00	12.87	11.62	12.50	10.00	10.25
three months	1.81	0.62	8.31	12.50	12.25	12.25	12.25	11.62	12.25	9.62	10.12
six months	2.75	1.87	8.62	11.37	11.37	11.12	11.37	11.12	11.50	9.12	10.12
twelve months	3.25	2.19	7.94	10.37	10.25	9.37	9.75	9.75	10.50	9.00	9.37

Euro-currency bank credits

publicly-announced in period, in millions of dollars

	1977	1978	1979	1980				
				Sep	Oct[r]	Nov[r]	Dec[p]	Year
Industrial countries	**17 205**	**28 952**	**27 248**	**2 413**	**5 486**	**4 371**	**5 766**	**38 722**
Australia	360	212	941	403	1 469	—	—	2 475
Canada	3 292	5 705	1 845	—	—	1 020	3 000	4 676
Denmark	868	2 242	1 205	10	10	106	5	1 469
Finland	314	550	92	—	—	—	—	1 040
France	2 325	1 915	2 955	—	—	183	—	1 744
Greece	204	509	1 010	360	18	79	—	1 316
Ireland	440	616	687	—	20	106	—	237
Italy	1 024	2 485	3 708	275	1 415	86	390	6 533
Norway	182	1 517	935	—	129	125	—	664
Spain	1 973	2 426	4 184	219	1 041	510	883	5 370
Sweden	1 446	1 872	1 263	—	162	350	—	1 720
United Kingdom	1 992	3 899	795	—	312	56	—	1 466
United States	826	1 206	2 348	725	440	100	1 105	3 503
Other[a]	1 959	3 798	5 280	421	470	1 650	383	6 509
Developing countries	**20 986**	**37 290**	**47 964**	**2 913**	**4 300**	**4 116**	**1 541**	**34 530**
Non-OPEC countries	13 504	26 892	35 411	2 218	3 222	3 410	1 066	23 192
Argentina	849	1 461	2 965	45	550	160	100	2 475
Brazil	2 814	5 634	6 278	157	396	1 292	25	4 091
Chile	591	1 045	867	168	266	114	58	1 186
Korea	1 265	2 651	3 258	65	6	617	95	1 916
Malaysia	212	858	1 168	—	—	—	—	—
Mexico	2 727	7 250	8 243	1 000	985	94	400	5 920
Morocco	797	605	500	—	170	—	—	419
Peru	189	—	596	—	90	—	55	480
Philippines	698	2 073	2 067	65	265	165	—	971
Taiwan	524	255	1 063	211	5	—	—	280
Other[b]	2 838	5 060	8 406	507	489	968	333	5 454
OPEC countries	7 481	10 398	12 553	695	1 078	706	475	11 338
Algeria	723	2 576	1 906	—	—	—	—	40
Indonesia	817	1 118	1 061	—	167	8	350	1 384
Nigeria	1 000	825	1 373	75	698	54	—	1 365
United Arab Emirates	1 086	726	401	—	1	39	1	101
Venezuela	1 666	2 054	6 830	620	62	605	123	6 714
Other	2 189	3 099	1 373	—	150	—	1	1 734
Communist countries	**3 394**	**3 767**	**7 325**	**46**	**681**	**42**	**200**	**2 809**
China	—	—	3 395	—	—	42	—	181
East Germany	832	642	796	46	181	—	—	303
Hungary	300	700	260	—	300	—	—	550
Poland	19	374	849	—	—	—	—	800
Other[c]	2 243	2 051	2 025	—	200	—	200	975
International organizations	**190**	**160**	**275**	—	**20**	—	—	**430**
TOTAL	**41 775**	**70 169**	**82 812**	**5 372**	**10 487**	**8 529**	**7 507**	**76 491**

[a] includes multi-national organizations [b] includes regional development organizations [c] includes COMECON institutions [p] preliminary
[r] revised

International bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980							
	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
U.S. companies:											
U.S. dollar	7.95	8.55	10.13	10.98	10.39	9.83	9.99	10.60	10.73	11.27	n.a.
Swiss franc	5.31	5.70	6.61	7.19	7.23	7.29	7.28	7.30	7.28	7.26	n.a.
European companies:											
U.S. dollar	8.42	9.21	10.93	11.94	11.07	10.53	10.72	11.47	11.71	12.04	n.a.
German mark	6.80	6.84	7.55	8.36	7.84	7.76	7.63	7.85	8.31	8.66	n.a.
Governments:											
U.S. dollar	8.42	9.12	10.66	11.67	11.06	10.47	10.50	10.90	11.08	11.22	n.a.

New international bond issues

new issues in period, in millions of dollars

	1977	*1978*	*1979*	*1980*				
				Sep	*Octr*	*Novr*	*Decp*	*Year*
By type:								
Euro-bonds, total	**17 771**	**14 125**	**18 726**	**1 705**	**3 082**	**1 690**	**1 454**	**23 839**
by category of borrower								
U.S. companies	1 130	1 122	2 872	373	755	392	227	4 120
Foreign companies	7 347	4 540	7 183	470	1 089	982	662	9 022
State enterprises	4 667	3 291	4 524	405	933	116	233	5 755
Governments	2 936	3 643	2 433	337	257	20	169	2 955
International organizations	1 691	1 529	1 714	120	48	180	163	1 947
by currency of denomination								
U.S. dollar	11 627	7 290	12 565	1 028	2 330	1 047	1 111	16 300
German mark	4 131	5 251	3 626	262	450	250	63	3 607
Dutch guilder	452	394	531	65	67	140	28	1 050
Canadian dollar	655	—	425	22	—	—	—	279
European unit of account	28	165	253	12	28	—	—	65
Other	878	1 025	1 326	316	207	253	252	2 538
Foreign bonds outside the United States, total	**8 777**	**14 359**	**17 749**	**1 343**	**1 261**	**1 623**	**842**	**14 513**
by category of borrower								
U.S. companies	40	245	217	—	—	88	—	307
Foreign companies	1 421	2 110	3 463	180	378	568	274	3 157
State enterprises	2 427	3 163	3 284	288	330	342	169	2 822
Governments	2 043	5 771	7 663	533	120	302	52	4 086
International organizations	2 846	3 070	3 122	342	433	323	347	4 141
by currency of denomination								
German mark	2 161	3 789	5 379	364	281	237	252	4 839
Swiss franc	4 970	5 698	9 777	606	636	1 119	505	7 617
Dutch guilder	211	385	75	77	75	—	—	259
Japanese yen	1 271	3 826	1 833	279	48	259	—	1 088
Other	144	671	685	17	221	8	85	710
Foreign bonds in the United States, total	**7 428**	**5 795**	**4 515**	**275**	**1 000**	**205**	**220**	**3 429**
by category of borrower								
Canadian entities	3 022	3 142	2 193	275	800	191	—	2 136
International organizations	1 917	459	1 100	—	200	—	—	550
Other	2 489	2 194	1 222	—	—	14	220	743
By country of borrower:								
Industrial countries	**23 851**	**24 964**	**31 886**	**2 371**	**4 336**	**2 920**	**1 771**	**32 603**
Australia	1 074	1 218	593	146	29	39	—	538
Austria	1 384	1 027	1 218	255	158	61	142	1 858
Canada	5 277	4 764	4 197	297	935	205	148	3 796
Denmark	796	1 018	752	89	58	94	17	1 125
Finland	358	952	699	—	27	—	—	392
France	1 945	1 286	2 106	145	385	417	140	2 728
Japan	1 979	3 467	5 775	428	544	958	429	5 336
Netherlands	682	251	832	13	216	140	28	1 563
New Zealand	567	744	553	—	25	—	—	293
Norway	1 889	2 751	1 955	112	44	35	123	891
Sweden	1 574	876	1 530	293	312	152	429	3 244
United Kingdom	1 915	1 365	1 181	93	293	100	—	1 733
United States	1 353	2 973	6 767	373	755	480	227	5 599
Developing countries	**3 421**	**4 227**	**3 093**	**490**	**326**	**95**	**235**	**2 475**
Non-OPEC countries	2 676	2 684	2 667	248	245	95	235	1 932
Brazil	732	843	930	56	—	—	—	349
Mexico	1 282	568	363	25	125	—	95	533
Philippines	129	170	175	70	—	—	—	70
OPEC countries	745	1 543	418	242	81	—	—	543
Algeria	166	721	208	—	—	—	—	—
Venezuela	438	588	55	197	81	—	—	398
Communist countries	**248**	**30**	**75**	—	—	—	—	**65**
Hungary	174	—	—	—	—	—	—	65
International organizations	**6 454**	**5 058**	**5 936**	**462**	**681**	**503**	**510**	**6 638**
TOTAL	**33 976**	**34 279**	**40 990**	**3 323**	**5 343**	**3 518**	**2 516**	**41 781**

Central bank discount rates

	1977	1978	1979		1980			Current	
	end Dec	end Dec	end Sep	end Dec	end Mar	end Jun	end Sep	Dec 22 1980	effective since
United States	6.00	9.50	11.00	12.00	16.00[a]	11.00	11.00	13.00	Dec 5, 80
Canada	7.50	10.75	12.25	14.00	15.69	10.63	11.20	17.36	Dec 19, 80
Japan	4.25	3.50	5.25	6.25	9.00	9.00	8.25	7.25	Nov 5, 80
United Kingdom	7.00	12.50	14.00	17.00	17.00	17.00	16.00	14.00	Nov 25, 80
Belgium	9.00	6.00	9.00	10.50	14.00	13.00	12.00	12.00	Jul 31, 80
France	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	3.00	3.00	5.00	6.00	7.00	7.50	7.50	7.50	May 2, 80
Italy	11.50	10.50	10.50	15.00	15.00	15.00	16.50	16.50	Sep 29, 80
Netherlands	4.50	6.50	8.00	9.50	9.50	9.50	8.50	8.00	Oct 21, 80
Austria	5.50	4.50	3.75	3.75	6.75	6.75	6.75	6.75	Mar 21, 80
Denmark	9.00	8.00	11.00	11.00	13.00	13.00	12.00	11.00	Oct 27, 80
Finland	8.25	7.25	7.25	8.50	9.25	9.25	9.25	9.25	Feb 1, 80
Ireland	6.75	11.85	13.70	16.40	16.85	16.85	13.50	12.75	Oct 10, 80
Norway	6.00	7.00	7.00	9.00	9.00	9.00	9.00	9.00	Nov 30, 79
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	Jul 26, 77
Sweden	8.00	6.50	8.00	9.00	10.00	10.00	10.00	10.00	Jan 18, 80
Switzerland	1.50	1.00	1.00	2.00	3.00	3.00	3.00	3.00	Feb 28, 80
Argentina	165.27	108.19	107.04	89.90	74.98	85.86	69.64	74.88	Nov 17, 80
Brazil	28.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	Nov, 78
Korea	14.00	14.50	14.50	14.50	20.50	19.50	17.50	15.50	Nov 11, 80
New Zealand	10.00	10.50	13.00	13.00	13.00	13.00	14.00	14.00	Jul, 80
Philippines	6.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	May 19, 78
Singapore	3.50	4.50	5.75	6.75	8.50	8.50	8.75	10.00	Nov 13, 80
South Africa	9.00	8.50	7.00	7.00	7.00	7.00	7.00	7.00	Aug 13, 79
Venezuela	7.00	7.50	9.50	11.00	12.00	10.00	10.00	13.00	Nov 14, 80

a: applicable to large banks; 13% for other banks

Day-to-day money rates

monthly averages

	1977	1978	1979	1980							
	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
United States	6.56	10.03	13.78	17.61	10.98	9.47	9.03	9.61	10.87	12.81	15.32
Canada	6.84	9.44	13.83	15.58	13.68	11.37	10.20	9.86	9.82	10.70	11.05
Japan	5.01	4.57	8.02	12.21	12.56	12.62	12.68	12.11	11.40	11.00	9.61
Australia	9.96	8.40	7.84	8.99	10.74	10.34	10.91	9.63	9.81	8.96	9.84
United Kingdom	4.81	10.00	14.87	16.06	15.90	14.06	15.06	14.87	14.90	15.00	12.25
Belgium	7.48	6.73	10.65	14.94	13.78	12.43	11.87	10.01	9.64	9.60	10.16
France	9.30	6.67	12.17	12.40	12.61	12.43	12.04	11.32	11.37	11.22	10.74
Germany	3.24	3.61	9.15	9.06	9.80	10.04	9.81	8.95	9.28	8.98	8.82
Italy	11.37	11.00	16.00	16.62	16.75	16.87	16.87	16.87	16.87	17.87	17.62
Netherlands	5.27	10.00	15.67	10.46	10.80	11.01	10.34	10.11	9.75	9.30	9.00
Austria	9.25	5.37	8.50	9.87	10.50	10.50	10.75	10.25	11.00	11.00	11.50
Finland	22.99	9.29	13.53	12.36	12.49	12.50	12.50	12.50	12.50	12.50	12.50
Ireland	8.00	12.12	16.88	17.62	17.38	17.38	16.81	13.75	13.62	13.25	13.38
Spain	7.22	16.75	9.61	14.76	17.81	14.22	12.71	12.57	13.16	14.38	15.24
Sweden	8.91	6.26	11.99	10.74	12.07	12.74	11.75	12.90	11.95	13.00	11.80
Switzerland	0.85	0.00	1.25	2.75	4.00	3.75	2.50	6.50	2.00	0.87	3.37
Argentina	n.a.	n.a.	78.22	56.66	58.14	64.92	83.39	52.89	51.36	54.58	58.04
Brazil	28.44	35.64	32.28	17.88	20.52	25.56	30.84	31.80	35.76	38.28	40.56
Hong Kong	4.87	9.67	14.19	13.62	12.37	8.00	7.25	8.75	8.31	10.87	13.87
Korea	14.40	15.00	15.00	19.20	19.20	19.20	19.20	19.20	17.22	17.22	14.82
Philippines	14.44	13.22	16.25	15.45	13.24	11.33	10.44	6.47	9.71	9.26	n.a.
Singapore	3.59	4.98	10.17	10.47	11.19	9.42	9.15	8.97	10.75	14.53	11.06
South Africa	7.65	7.11	3.81	4.06	4.23	4.37	4.26	4.15	4.35	4.47	4.99
Euro-dollars	6.94	10.80	14.41	16.90	9.95	9.58	9.13	9.86	10.96	13.18	16.15

Treasury bill rates

bond-equivalent yields, at or near end of month

	1977	1978	1979	1980							
	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
United States	6.33	9.42	12.39	10.29	8.05	7.90	9.12	10.70	11.09	13.07	14.84
Canada	7.17	10.46	13.66	15.15	11.58	10.24	10.06	10.49	10.95	11.91	13.70
Japan	4.15	3.39	5.68	5.68	6.82	6.82	6.82	6.82	6.44	6.44	6.44
Australia	8.35	8.35	9.31	11.12	10.83	10.79	10.64	10.53	10.56	10.95	11.47
United Kingdom	6.42	12.01	16.45	16.73	16.75	16.29	14.69	15.00	14.37	14.44	13.38
Belgium	9.25	9.25	14.40	17.00	15.50	13.75	12.75	12.35	12.35	12.10	12.75
Ireland	6.74	11.83	16.37	16.88	16.69	16.57	16.46	13.47	13.43	12.72	12.78
Italy	12.81	12.81	15.62	16.12	15.75	16.12	16.25	16.12	16.00	16.87	16.88
Netherlands	6.00	9.50	12.75	10.25	10.87	10.37	9.87	10.25	9.25	8.85	8.75
Sweden	9.21	5.84	9.74	10.78	12.89	12.89	12.84	12.84	12.90	12.90	12.90
Argentina	109.06	82.55	71.04	58.55	64.01	70.26	70.43	48.60	51.03	58.31	60.73
Brazil	38.08	41.21	27.84	27.33	24.62	33.84	39.14	42.66	43.70	50.18	66.34
Korea	16.88	17.01	19.53	22.01	22.01	22.01	22.01	22.01	19.50	19.50	16.35
Mexico	n.a.	12.75	17.89	22.33	22.34	21.55	20.91	21.36	23.42	24.73	n.a.
New Zealand	7.50	10.50	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25
Philippines	10.04	12.08	12.63	12.31	12.31	12.46	12.54	12.66	12.67	12.70	n.a.
Singapore	3.17	4.01	6.18	7.21	7.10	6.85	6.79	6.89	6.99	6.98	6.86
South Africa	8.17	7.61	4.30	4.47	4.78	4.72	4.47	4.64	4.84	5.13	5.71

Representative money-market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money-market instruments, other than Treasury bills, at or near end of month

	1977	1978	1979	1980							
	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
United States	6.84	10.57	13.70	13.70	7.90	8.03	8.82	10.91	12.24	14.24	17.15
Canada	7.25	10.62	14.15	15.40	11.75	11.50	10.60	10.75	11.10	12.50	14.10
Japan	5.89	4.64	8.01	12.12	12.53	10.87	11.54	10.95	11.48	9.57	9.80
Australia	9.75	9.10	10.30	14.00	13.50	13.00	12.50	12.40	12.00	11.70	11.75
United Kingdom	6.50	12.50	17.00	17.12	17.00	17.00	14.87	16.69	15.87	16.62	14.50
Belgium	9.50	9.25	14.45	17.00	15.75	14.00	13.00	12.60	12.60	12.45	13.00
France	9.19	6.44	12.62	12.56	12.37	12.25	11.44	11.62	12.31	11.31	11.44
Germany	3.60	3.70	8.70	9.97	10.20	9.95	9.30	8.90	9.10	9.20	9.45
Ireland	6.75	13.00	18.12	18.75	17.88	17.50	16.75	14.50	13.75	13.37	13.75
Italy	11.75	11.37	17.12	16.50	17.12	17.25	17.25	17.25	18.75	17.75	17.37
Netherlands	6.25	10.50	13.00	10.37	11.25	10.62	9.37	10.75	10.37	9.25	10.00
Spain	12.06	22.80	13.20	17.50	18.70	16.90	15.00	14.60	14.40	15.30	16.00
Switzerland	2.02	0.50	6.12	6.37	5.62	5.87	5.25	6.12	5.87	5.62	6.12
Hong Kong	5.73	11.82	14.37	14.75	12.12	8.75	7.94	9.25	10.44	12.56	15.87
Korea	16.88	17.01	19.53	22.01	22.01	22.01	22.01	22.01	19.27	19.27	16.35
New Zealand	11.87	12.00	16.00	15.25	14.25	13.50	13.25	13.40	14.00	14.25	14.10
Philippines	11.96	11.48	10.41	11.79	11.06	12.22	9.96	10.92	10.97	11.96	n.a.
Singapore	4.81	7.38	10.12	11.31	10.75	9.75	9.50	9.50	11.62	13.62	14.12
South Africa	9.00	7.85	4.72	5.55	5.34	5.24	4.93	4.93	5.00	5.05	6.07

Commercial bank deposit rates

at or near end of month

	1977	1978	1979	1980							
	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
United States	6.80	10.90	13.55	12.95	8.70	8.90	8.90	11.55	12.25	14.25	17.07
Canada	7.25	10.45	14.05	15.35	11.50	11.00	10.50	10.75	10.65	12.40	13.95
Japan	3.25	2.50	8.37	13.00	13.20	11.00	11.50	11.00	11.30	9.50	9.90
Australia	9.50	8.50	10.25	13.00	13.15	13.33	12.41	12.03	11.33	10.95	11.21
United Kingdom	6.37	12.25	16.81	17.16	17.00	16.68	15.87	16.75	15.94	16.75	14.44
Belgium	9.50	9.87	14.50	15.00	15.75	14.00	12.50	12.63	12.50	12.13	13.00
France	9.00	6.50	12.50	12.50	12.25	11.75	11.25	11.62	11.75	11.00	11.50
Germany	3.40	3.50	7.75	9.25	9.25	9.00	8.60	8.40	8.40	8.40	8.75
Italy	17.00	12.50	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25
Netherlands	7.00	11.62	13.50	10.75	11.50	10.75	9.50	10.62	10.25	9.75	10.25
Austria	9.00	6.75	8.50	9.87	10.00	10.37	10.75	11.37	11.62	11.50	11.50
Denmark	8.00	7.00	10.00	12.00	12.00	12.00	12.00	12.00	11.00	10.00	10.00
Finland	4.25	3.25	4.25	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Ireland	6.87	12.75	17.87	18.75	17.62	17.37	16.25	14.00	13.87	13.25	13.75
Norway	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Spain	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Sweden	7.75	6.25	8.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75
Switzerland	1.12	0.12	4.75	5.50	4.75	5.25	4.75	5.00	5.25	5.62	6.12
Argentina	n.a.	86.63	72.64	54.26	59.01	68.62	70.57	53.05	50.61	59.00	62.00
Brazil	39.60	46.80	45.00	44.76	43.68	43.80	45.24	47.40	49.56	54.48	61.20
Hong Kong	1.75	4.50	9.25	10.50	9.00	6.50	6.00	6.00	6.00	9.00	13.00
Korea	13.20	15.00	15.00	19.20	19.20	19.20	19.20	19.20	17.22	17.22	14.82
Mexico	11.00	12.00	16.75	22.03	21.11	19.13	18.20	18.98	20.74	21.74	n.a.
New Zealand	11.00	12.00	15.90	14.00	13.75	13.25	13.25	13.30	13.05	13.50	13.50
Philippines	8.50	8.50	10.50	10.50	10.50	10.50	10.50	14.00	14.00	14.00	14.00
Singapore	5.31	7.31	10.31	10.75	10.19	9.06	8.69	9.38	11.44	13.00	13.50
South Africa	8.70	7.30	4.82	5.35	5.22	5.15	4.75	4.77	4.90	5.10	6.62
Venezuela	7.00	7.25	15.00	17.00	13.00	12.00	12.00	12.00	12.00	12.00	12.00

Commercial bank lending rates to prime borrowers

at or near end of month

	1977	1978	1979	1980							
	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
United States	7.75	11.75	15.25	18.50	14.00	11.50	11.00	11.50	13.00	14.50	17.75
Canada	8.25	11.50	15.00	16.50	13.75	13.25	12.50	12.50	12.25	12.75	14.50
Japan	5.47	4.50	6.51	8.43	9.02	9.27	9.34	9.27	8.99	9.05	9.05
Australia	11.50	11.00	10.75	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50
United Kingdom	8.00	13.50	18.00	18.50	18.50	17.50	17.50	17.50	17.50	17.50	15.00
Belgium	10.00	10.00	15.25	18.75	18.75	17.25	17.00	15.75	15.75	15.75	15.75
France	11.35	10.95	13.65	14.15	14.15	14.15	13.90	13.40	13.40	13.40	13.40
Germany	6.00	5.50	9.75	10.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50
Italy	16.00	15.00	19.50	19.50	19.50	19.50	19.50	19.50	19.50	19.50	21.00
Netherlands	7.00	12.00	15.00	12.00	12.75	12.00	11.25	11.75	11.25	10.25	10.75
Austria	9.75	8.75	8.50	11.00	11.00	11.00	11.00	11.00	12.00	12.00	12.25
Denmark	12.50	10.00	13.75	15.75	15.75	15.75	15.75	15.75	14.75	13.75	13.75
Finland	8.85	7.87	9.06	9.85	9.84	9.86	9.84	9.83	9.84	n.a.	n.a.
Ireland	8.25	13.75	16.00	18.50	18.50	18.50	17.50	15.50	15.50	14.50	14.50
Norway	8.33	11.00	11.00	11.00	11.00	11.00	11.00	11.00	12.50	12.50	12.50
Spain	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00
Sweden	10.25	8.50	10.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75
Switzerland	5.75	5.00	5.00	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75
Argentina	152.08	86.75	80.00	60.50	70.50	75.50	74.50	58.50	53.00	60.00	66.00
Brazil	52.05	61.70	57.00	57.00	57.00	57.00	57.00	57.00	57.00	57.00	57.00
Hong Kong	4.75	8.75	14.50	16.00	14.50	12.00	10.00	10.00	10.50	13.00	17.00
Korea	15.00	18.50	18.50	24.50	24.50	23.50	23.50	23.50	21.50	21.50	19.50
Mexico	17.00	17.50	19.00	21.83	22.39	22.47	22.53	22.82	23.51	24.42	24.77
New Zealand	8.50	9.75	11.75	12.75	12.75	12.75	12.75	12.75	13.00	13.00	13.00
Philippines	14.00	14.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
Singapore	7.02	7.65	9.50	12.10	11.98	11.40	11.10	10.95	11.30	12.60	13.55
South Africa	12.50	11.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50
Venezuela	9.50	10.25	13.00	17.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00

Domestic government bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980							
	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
United States	7.97	9.00	10.20	10.38	10.24	9.90	10.70	11.46	11.90	12.33	12.25
Canada	8.77	9.68	11.32	12.01	11.39	11.29	12.32	12.42	12.98	13.22	13.01
Japan	6.40	6.40	8.63	9.65	8.75	8.45	8.63	8.77	8.92	8.84	9.26
Australia	9.50	8.90	10.45	11.85	11.85	11.80	11.80	11.85	12.00	12.40	12.60
United Kingdom	10.53	12.75	13.83	13.44	13.30	13.06	12.52	13.27	12.69	12.52	12.65
Belgium	8.76	8.80	11.13	12.02	12.26	11.84	11.77	12.08	12.43	12.46	12.61
France	11.07	9.94	12.59	13.94	13.49	13.34	13.43	13.46	13.85	14.27	14.24
Germany	5.52	6.65	7.91	8.93	8.20	8.00	7.78	7.95	8.24	8.55	8.59
Italy	10.82	10.89	11.28	11.63	11.64	11.80	12.06	12.00	12.12	12.53	12.42
Netherlands	8.11	8.48	9.29	10.59	9.97	9.95	9.66	10.08	10.25	10.20	10.46
Austria	9.00	7.91	8.20	9.52	9.26	9.04	9.21	9.62	9.61	9.90	n.a.
Denmark	16.83	17.27	18.28	20.57	20.27	20.90	19.95	20.71	20.29	19.24	19.40
Finland	10.25	9.19	9.58	10.59	10.46	10.44	10.49	10.52	10.35	10.48	10.43
Ireland	11.30	13.44	16.64	16.20	16.19	15.78	14.64	14.49	14.57	14.77	n.a.
Norway	8.37	8.19	10.04	10.26	10.31	10.16	10.21	10.73	n.a.	10.40	10.44
Sweden	9.84	10.09	11.22	11.33	11.31	11.38	11.38	11.46	n.a.	n.a.	n.a.
Switzerland	3.75	3.03	4.20	4.96	4.82	4.72	4.59	4.87	4.85	4.69	4.67
Argentina	181.65	112.18	47.94	59.98	47.21	57.33	81.94	42.24	40.46	38.21	101.38
New Zealand	10.00	10.02	12.98	13.47	13.44	13.49	13.40	13.25	12.98	12.96	n.a.
Philippines	13.40	13.40	13.20	13.40	13.40	13.40	13.40	13.40	13.40	13.40	13.40
South Africa	10.75	9.85	9.44	9.56	9.69	9.85	10.00	10.05	10.62	11.10	11.75
Venezuela	7.24	7.24	7.29	7.40	7.45	7.45	7.45	7.37	7.40	7.40	7.43

Domestic corporate bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980							
	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
United States	8.30	9.25	10.75	10.75	11.20	10.63	11.65	12.50	12.88	13.38	13.38
Canada	9.71	10.34	12.07	12.84	12.29	12.14	13.19	13.35	13.74	13.95	13.72
Japan	6.68	6.94	8.34	9.50	8.68	8.23	8.20	8.24	8.44	8.48	8.60
Australia	11.00	10.25	11.65	13.10	13.25	13.15	13.15	13.25	13.35	13.75	14.00
United Kingdom	11.88	13.53	14.96	14.66	14.39	13.98	13.33	13.90	13.78	13.61	13.63
Belgium	9.85	9.58	11.93	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
France	12.09	10.27	12.92	14.37	14.39	14.16	13.93	13.86	14.03	14.69	14.83
Germany	5.92	6.80	8.20	10.00	9.40	8.90	8.40	8.10	8.40	8.80	9.30
Italy	10.71	10.12	10.22	11.85	12.14	14.12	14.19	13.73	13.31	12.64	12.65
Netherlands	7.90	8.62	9.95	10.85	10.43	9.96	9.83	10.33	10.49	10.48	10.33
Norway	8.59	8.37	10.53	10.85	10.91	10.46	10.65	10.70	n.a.	10.55	11.24
Spain	11.58	12.17	11.77	11.45	10.89	10.83	10.90	n.a.	n.a.	n.a.	n.a.
Sweden	9.83	10.03	10.21	11.00	11.07	11.71	11.80	11.90	11.94	11.99	12.10
Switzerland	4.96	4.85	5.53	5.77	5.56	5.64	5.58	5.76	5.83	5.71	5.78
Korea	19.60	24.00	32.50	31.00	31.00	30.50	29.00	28.70	26.00	26.00	23.50
Mexico	17.56	20.37	21.99	26.26	24.70	23.75	24.99	26.26	26.13	26.12	27.55
Venezuela	10.39	12.43	14.55	15.94	14.40	12.81	12.82	12.41	12.40	13.55	14.78

Key to data in tables

I. International markets

Definitions

An *international bond* issue is one sold outside the country of the borrower. It may be either a Euro-bond issue or a foreign bond issue.

A *Euro-bond* issue is one underwritten by an international syndicate and sold principally in countries other than the country of the currency in which the issue is denominated.

A *foreign bond* issue is one underwritten by a syndicate composed of members from one country, sold principally in that country, and denominated in the currency of that country.

A *Euro-currency bank credit* is a loan in a currency which is not native to the country in which the bank office making the loan is located.

Data on *new international bond issue volume* include all publicly announced issues with an original maturity of three years or more, whether publicly or privately placed, but exclude those where the investor is a central bank, monetary authority, or government.

Data on *new Euro-currency bank credit volume* include all publicly announced loans with an original maturity of more than one year. A loan is included in the period in which the lending banks make a commitment covering the amount and terms of the loan to the borrower.

Categories of borrower

U.S. companies include both parent companies and their financing affiliates, either domestic or foreign.

Other companies include private companies domiciled outside the United States and their affiliates.

State enterprises include public agencies.

Governments include central and local governments.

Country of borrower

The country of the borrower is the residence of the borrowing entity, except where the entity is a financing vehicle, in which case the residence of the parent company and or guarantor is used.

International bond yields

Yields are calculated to the nearest day of maturity. Interest on bonds with annual coupons is discounted semiannually for comparability in computation of yield.

The yield indices are simple arithmetic averages of end-of-month secondary market yields for groups of selected straight-debt securities. Yield indices for six categories of bonds have been calculated according to borrower and currency. They are based on issues of good-quality, well-known borrowers. Occasionally the individual issues in each category are changed.

The number of issues represented in each of the indices is as follows:

Long-Term, U.S. companies, U.S. dollar — —ten Euro-bond issues.

Long-term, U.S. companies, Swiss franc — four foreign bond issues.

Long-term, European companies, U.S. dollar — ten Euro-bond issues.

Long-term, European companies, German mark — ten Euro-bond issues.

Long-term, governments, U.S. dollar — six Euro-bond issues (governments of Italy, Denmark, and France).

Euro-currency deposit rates

All data are prime banks' bid rates for deposits in London. Offer rates commonly used as a basis for Euro-dollar lending are generally .125% above bid rates.

II. Domestic markets

Day-to-day money rates

Argentina — 7-day interbank money.

Austria — day-to-day interbank rate.

Australia — approximate effective interest rate in the authorized short-term money market.

Belgium — interbank call money.

Brazil — overnight financing of Treasury bills (LTN). From December 1979, rates paid for federal funds.

Canada — chartered banks' day-to-day loans.

Finland — Bank of Finland call money.

France — interbank call money against private paper.

Germany — interbank call money.

Hong Kong — interbank 24-hour call rate.

Ireland — interbank call money.

Italy — interbank 48 hour call money.

Japan — Tokyo interbank call money, overnight lenders rate until December 1974. New series as of January 1975, unconditional lenders rate.

Korea — call money.

Netherlands — open-market call money.

Philippines — interbank call money.

Singapore — interbank overnight money.

South Africa — National Finance Corporation call money.

Spain — day-to-day interbank rate.

Sweden — interbank call money.

Switzerland — call money.

United Kingdom — call money.

United States — effective Federal funds rate.

Euro-dollars — prime banks' bid rate for overnight money.

Treasury bill rates

Argentina — 28-day Treasury bills.

Australia — new issues of 13-week Treasury notes.

Belgium — 3-month Treasury certificates.

Brazil — 91-day Treasury bills (LTN).

Canada — 3-month Treasury bills at tender.

Ireland — 3-month Central Bank Exchequer bills.

Italy — 6-month Treasury bills.

Japan — 60- to 62-day noninterest-bearing discount government bills.

Korea — 3-month Treasury bills sold by Korean Central Bank.

Mexico — 3-month Federal Treasury bills.

Netherlands — 3-month Treasury bills.

New Zealand — 3-month Treasury bills.

Philippines — 91-day Treasury bills at tender.

Singapore — 91-day Treasury bills at tender.

South Africa — 3-month Treasury bills at tender.

Sweden — new issues of 3-month Treasury bills.

United Kingdom — 91-day Treasury bills at tender.

United States — 3-month Treasury bills.

Representative money-market rates

Australia — 3-month prime finance company paper.

Belgium — 4-month Fonds des Rentes certificates.

Canada — 3-month prime finance company paper.

France — 3-month interbank money against private paper.

Germany — 3-month interbank deposits.

Hong Kong — 3-month interbank deposits.

Ireland — 3-month interbank deposits.

Italy — 3-month interbank deposits.

Japan — Tokyo interbank call money, unconditional, lender's rate until December 1974. New series as of January 1975, 3-month repurchase agreements.

Korea — 3-month financial bill.

Netherlands — 3-month municipal loans until December 1976. New series as of January 1977, 3-month interbank deposits.

New Zealand — 90-day commercial bills.

Philippines — 90-day promissory notes.

Singapore — 3-month bank acceptances.

South Africa — 90-day bank acceptances.

Spain — 1- to 2-month interbank deposits.

Switzerland — 3-month interbank deposits.

United Kingdom — 3-month interbank deposits.

United States — 3-month prime industrial paper.

Commercial bank deposit rates

Argentina — nominal 30-day time deposits. Average of bank rates published by the Central Bank.

Austria — 3-month time deposits.

Australia — 3-month certificates of deposit.

Belgium — special maximum rate for 3-month time deposits in large amounts.

Brazil — 6-month negotiable certificates of deposit of investment banks net of taxes.

Canada — 3-month time deposits.

Denmark — time deposits of 3-months' notice.

Finland — time deposits of six-month notice.

France — 3-month time deposits of FF. 1,000,000.

Germany — 3-month time deposits in large amounts.

Hong Kong — 3-month certificates of deposit. Rate set by the Hong Kong Exchange Banks' Association.

Ireland — 3-month time deposits.

Italy — 3-month time deposits of Lit. 100 million or more.

Key to data in tables – continued

Japan — 3-month time deposits until April 1979. 90-day yen-denominated certificates of deposit issued by the Tokyo office of Morgan Guaranty Trust Company.

Korea — 3-month time deposits.

Mexico — 3-month certificates of deposit issued by financieras to corporations for amounts over Ps. 1 million. Higher rates available to individuals.

Netherlands — 3-month time deposits in large amounts.

New Zealand — 6-month transferable certificates of deposit.

Norway — 3-month time deposits. Higher rates may be negotiated for 12-month or more time deposits in large amounts.

Philippines — 3-month time deposits.

Singapore — 3-month time deposits until May 1975, 3-month certificates of deposit thereafter.

South Africa — 3-month time deposits at merchant bank until May 1975. Negotiable certificates of deposit from June 1975.

Spain — maximum legal rate for 3-month deposits.

Sweden — deposits at 6-months' notice.

Switzerland — 3-month time deposits.

United Kingdom — 3-month time deposits.

United States — 3-month negotiable certificates of deposit issued by Morgan Guaranty Trust Company.

Venezuela – 6-month negotiable certificates of deposits for large amounts until December 1978. New series as of January 1979, similar rate for domestic depositors only.

Commercial bank lending rates to prime borrowers

Argentina — average rate on 30-day loans.

Austria — overdraft rate for prime borrowers, including commission.

Australia — approximate overdraft rate for prime borrowers. Rate for prime borrowers usually .25% to .75% below the maximum overdraft rate; rate shown is .5% below.

Belgium — prime overdraft rate.

Brazil — commercial bank legal maximum rate (discount basis) for maturities up to 60 days until August 1977. In addition, compensating balances were required. New series as of September 1977, weighted average investment bank lending rates.

Canada — prime rate.

Denmark — approximate rate for loans and advances to prime borrowers.

Finland — average rates on total commercial bank lending.

France — overdraft rate for prime borrowers, including a commission of .05% per month on highest debit balance during the month.

Germany — approximate effective overdraft rate for prime borrowers.

Hong Kong — prime rate.

Ireland – AA corporate borrowing rate.

Italy — unsecured overdraft rate for prime borrowers.

Japan — average rate on loans and discounts of city banks, computed by the Bank of Japan until December 1974. New series as of January 1975, average contracted interest rate for short-term loans of city banks. In addition, compensating balances may be required.

Korea — prime rate.

Mexico — major bank prime rate, subject to legal maximum. In addition, compensating balances are required.

Netherlands — overdraft rate for prime borrowers, including commission.

New Zealand – overdraft rate for prime borrowers.

Norway — overdraft rate, including a commission of .333% prior to July 1978, .25% thereafter, per quarter on the total line of credit.

Philippines — maximum legal rate, for unsecured loans exclusive of service fee.

Singapore — most common overdraft rate, major banks.

South Africa — unsecured overdraft rate for prime borrowers.

Spain — maximum legal rate for discounting commercial bills plus a commission of 1% per annum. In addition, compensating balances may be required.

Sweden -- actual interest rate on 3-month loans to prime industrial borrowers.

Switzerland — unsecured overdraft rate for prime borrowers, excluding commission of .25% per quarter on average or highest outstanding debit balance in quarter.

United Kingdom — unsecured overdraft rate for prime borrowers.

United States — prime rate of Morgan Guaranty Trust Company. In addition, compensating balances are required.

Venezuela – representative rate for prime borrowers until December 1978. New series as of January 1979, similar rate for domestic prime borrowers only.

Domestic government bond yields

Argentina – 7% National Adjustable Bond, third series maturing in 1985, inflation adjusted by the Official Correction Index.

Austria — Austrian National Bank average yield on all outstanding government bonds.

Australia — 20-year government bonds.

Belgium — Belgian National Bank average yield on government bonds maturing in more than five years.

Canada — Bank of Canada average yield on all direct government bonds due or callable in 10 years or more.

Denmark – 5% government bond of 2007 until December 1976. New series as of January 1977, 10% government bonds with maturity of 7 to 8 years.

Finland — rate of interest at issue on central government bonds intended for public subscription, weighted by sales of bonds in the latter half of each month.

France — Institut National de la Statistique et des Etudes Economiques (INSEE) yield on public and semi-public sector bonds.

Germany — Frankfurter Allgemeine Zeitung (FAZ) 7% public authority bond average until September 1978. New series as of October 1978, FAZ 10-year public authority bond average.

Ireland – 15-year government bonds.

Italy — average of yields on six outstanding bonds of public-sector entities, new series as of January 1977.

Japan — average yield on outstanding maturities of 6.5% national government bonds until December 1974. New series as of January 1975, secondary market yield for the 6.1% due 1988 national government bond.

Netherlands — Central Bureau of Statistics (CBS) average yield on three latest 7% to 7.75% government bonds.

New Zealand – average yield on government bonds maturing after 10 years.

Norway — 5% government bond of 1996.

Philippines — Central Bank 5-year Certificate of Indebtedness, regular issue.

South Africa – 25-year government bonds.

Sweden — 15-year government bonds.

Switzerland — Swiss Confederation bond average.

United Kingdom — F.T. (Financial Times) Actuaries 20-year government stock until December 1975. New series as of January 1976, F.T. Actuaries 25-year government stock.

United States — Morgan Guaranty 20-year U.S. Government Bond Index.

Venezuela — Banco Central average yield on public-sector bond issues.

Domestic corporate bond yields

Australia — long-term secured debentures, indicated by Australian United Corporation.

Belgium — Belgian National Bank average yield on private corporate bonds maturing in more than five years.

Canada — McLeod, Young, Weir Co. Ltd., average yield on ten industrial bonds.

France — INSEE tax-adjusted average yield on outstanding private corporate bonds.

Germany – FAZ 6% industrial bond average until September 1978 New series as of October 1978, Bundesbank average yield on industrial bonds

Italy – average of yields of four outstanding bonds of leading Italian industrial companies; new series as of January 1977.

Japan — average of yields on outstanding Nippon Telegraph & Telephone interest-bearing yen debentures until December 1974. New series as of January 1975, secondary market yield for NTT bond maturing April 1987.

Korea — average of yields on 3-year corporate bonds guaranteed by local banks.

Mexico — 9% Teléfonos de Mexico bond, series AA, of 1990 until December 1976. Average of yields of six outstanding Telefonos de Mexico bonds from January 1977.

Netherlands — CBS average yield on three 6% to 6.5% corporate bonds.

Norway — 5.75% Dalen Portland-Cement bond of 1969-1984.

Spain — average yield for a selected group of electricity companies.

Sweden — Central Satistical Bureau average yield on industrial bonds.

Switzerland — average yield on outstanding bonds of four leading Swiss companies.

United Kingdom — F.T. (Financial Times) Actuaries 20-year debentures and loans.

United States — Salomon Brothers index of new issue yields for Aa industrial bonds with five-year call protection.

Venezuela — average of yields on 15-year bond issues of Electricidad de Caracas.

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World Financial Markets

Morgan Guaranty Trust Company of New York

January 1981

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Table 1

Exchange rate changes from December 1, 1980 to January 28, 1981

in percent vis-à-vis U.S. dollar and on a trade-weighted average basis

	vis-à-vis U.S. dollar	trade-weighted average basis
U.S. dollar	—	0.5
Canadian dollar	0.0	0.0
Japanese yen	7.2	9.0
Belgian franc	—6.2	—1.3
Dutch guilder	—6.8	—2.0
French franc	—6.0	—1.6
German mark	—6.6	—2.0
Italian lira	—6.5	—1.7
Swiss franc	—6.7	—2.4
British pound	2.4	6.9

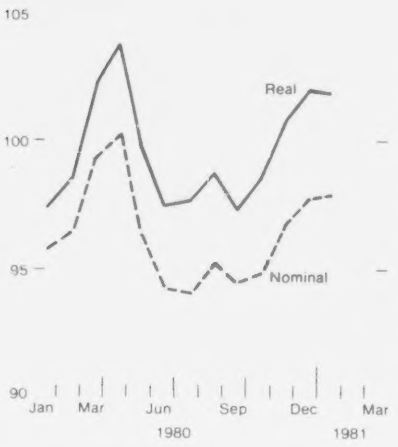
Foreign exchange market developments

The dollar has been strong against most of the major currencies except the yen and sterling over the past couple of months. It reached a two-year high against the German mark of 2.08 per dollar this month, and it is close to or above its 1980 highs against the other EMS currencies and the Swiss franc, after having appreciated by about 6%-7% against these currencies since December 1, 1980 (see Table 1). During the last two months, however, the dollar has fallen by about 7% against the yen and by 2½% against sterling. This has left its value on a trade-weighted basis close to its level at the beginning of December 1980 and roughly 4% above its 1980 low reached last summer (see chart).

The dollar's exceptional strength is partly a result of the continued very high U.S. interest rates. At the beginning of this year, short-term rates in the United States had slipped by as much as three to four percentage points from their December 1980 peaks, triggering a temporary weakening of the dollar. Since then, U.S. interest rates have risen again, although they are still slightly below their peaks of last year. With rates in most other industrial countries also marginally below their December levels, there continue to be large interest rate differentials in favor of the dollar (see Table 2).

For the near term at least, interest-rate developments are likely to continue to have a major bearing on the dollar. The dollar could very well lose some of its strength in the next few months as a consequence of a modest easing of U.S. interest rates. But, the chances of a repeat of last spring's precipitous reduction in U.S. interest rates and abrupt decline in the dollar do not appear very large. Even though the U.S. economy is expected to be weak in the first half of this year, with real GNP projected to rise at only a 1% annual rate, the situation is considerably different from that of a year ago, when real output dropped at a 9% annual rate in the second quarter of 1980 in the aftermath of the credit control program. Inflation is also likely to remain on an upward trend in the early part of this year, instead of decelerating, as was the case last spring. In addition, the financing requirements of the U.S. government will remain very large this year, with the budget deficit for the current fiscal year expected to approach or exceed $60 billion. In view of these prospects and the fact that the

Effective dollar exchange rates
monthly averages
index, 1975-1979 100



Latest plotting January 26

Table 2

Three-month Euro-currency deposit rates

in percent per annum

	Jun 30 1980	*Dec 19 1980*	*Jan 26 1981*
U.S. dollar	9.75	20.31	18.75
Japanese yen	12.25	10.12	8.25
French franc	12.25	11.87	10.75
German mark	9.37	10.06	9.06
Swiss franc	5.69	7.19	6.00
British pound	16.75	14.75	14.00

Table 3

U.S. trade and current account

in billions of dollars

	1980	*1981*
Trade balance (customs)[1]	—19	—24
Agricultural and raw materials	27	32
Fuels	—72	—92
Manufactures and re-exports	26	36
Trade balance (BOP)	—25	—24
Services and tranfers, net	29	34
Current account	4	10

[1] FAS FAS. Beginning January 1981, customs figures include imports through U.S. Virgin Islands.

money supply (M-1B) is virtually at the upper limit of its target range, only a gradual reduction of U.S. interest rates seems likely.

Any declines in U.S. interest rates, moreover, are likely to be accompanied by some drop in foreign interest rates. The Japanese authorities already have taken actions to ease monetary policy, which have included two discount rate cuts in the second half of 1980 and a relaxation of the Bank of Japan's guidelines on the expansion of bank credit. An additional discount-rate cut of 75-100 basis points is widely anticipated in the next few months. The German authorities have moved more cautiously in easing monetary policy, despite the depressed state of the economy, mainly because of the pressures on the mark and the financing of the country's large balance-of-payments deficit. Declines in U.S. rates could ease some of these pressures and thereby relax one of principal constraints on German economic policy. These factors suggest that even with some reduction in U.S. interest rates in the months ahead, there will still be large interest-rate differentials in favor of the dollar for some time to come.

A second factor that is likely to underpin the dollar this year is a relatively strong U.S. current account position. During the second half of 1980, the U.S. current account is estimated to have been in surplus at an $18 billion seasonally adjusted annual rate, following a deficit of $10 billion at an annual rate in the first half of the year. This swing was the result of a $23 billion annual-rate reduction in the U.S. trade deficit and a $5 billion annual-rate rise in the surplus on the services account. While a weakening trend in the current account is anticipated during this year, the U.S. current account should still remain in sizable surplus. The outlook for 1981 as a whole calls for a surplus of about $10 billion, compared with an estimated $4 billion surplus in 1980 (see Table 3) — figures that are very similar to those forecast by the U.S. Treasury Department. This forecast is fairly cautious since it assumes that agricultural export prices will remain close to their present levels in the remainder of this year and that net oil import volume will decline by less than 6½% in 1981, compared with a 21% drop in 1980. In view of the precarious situation in grain markets and the considerable scope for oil conservation in the United States, there is a good chance that the U.S. current account surplus in 1981 could exceed the $10 billion figure that is currently forecast.

By comparison, most of the major European countries are projected to have current account deficits this year that approach or exceed those of last year (see Table 4). In the case of the EMS members, this development mainly reflects the adverse movement of their terms of trade resulting from the depreciation of their currencies and higher oil prices, which largely offset reduced import-volume growth. For Germany, in particular, this is likely to mean an even larger deficit than last year's $16 billion estimate, with the deficit in the first half of the year exceeding $20 billion at an annual rate. Some narrowing, however, is anticipated in the second half of this year as German export and import volumes respond to the 9% real depreciation of the mark this past year (see chart).

The situation in the United Kingdom and in Japan should differ from that of the continental European countries. Both countries' current account positions strengthened considerably during the second half of 1980 as a consequence of sharp reductions in their import volumes and the favorable effects of currency ap-

Table 4

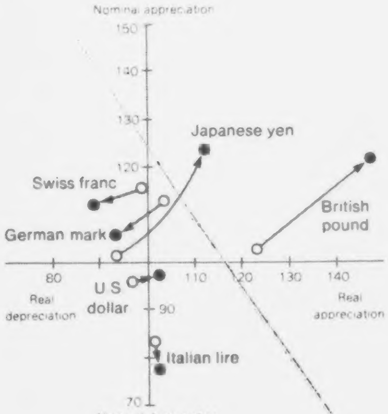
Projected current account balances

in billions of dollars

	1980	1981
Industrial countries	—66	—69
United States	4	10
Canada	—1	—3
Japan	—11	—4
Western Europe	—58	—68
France	—7	—7
Germany	—16	—18
Italy	—10	—10
United Kingdom	5	5

Nominal and real effective exchange rates

○ *January 1980* ● *January 23, 1981*
index, 1975-1979 = 100



preciation on their terms of trade. These factors, together with higher oil-export revenues, should keep the British current account surplus only slightly below last year's $5.5 billion, although some weakening is anticipated in the second half of this year as the steep, 45% real appreciation of sterling over the last two years begins to take its toll. These factors should also lead to a substantial reduction in Japan's current account deficit to about $4 billion this year from $10.8 billion in 1980. By the second half of this year, however, the effects of the yen's 20% real appreciation in the last twelve months should be more apparent on Japanese exports, while imports begin to rise rapidly in response to a pickup of economic activity, ending the pattern of current account improvement.

With the United States in relatively strong current account position this year, inflation should remain as the principal adverse factor confronting the dollar. Even though the effect of U.S. inflation on the dollar has been more than offset by high interest rates, continuation of this trend would eventually result in a deterioration of U.S. international price competitiveness and speculation against the dollar. Consumer price inflation in the United States can be expected to decelerate during the course of 1981 from very high rates in the early part of this year, but increases in compensation per man hour on the order of 10½% to 11% should keep the rate for the year as a whole from falling much below 11%. The United States, thus, again faces the prospect of inflation that is about two percentage points above the average of its major trading partners. The differential is even larger *vis-à-vis* both Japan and Germany, which are projected to have inflation rates in the vicinity of 5% this year.

At the moment, the attention of the international community is focused on how the new U.S. administration will tackle the problem of persistent, high U.S. inflation: Will the Reagan administration be successful in its desire to achieve a more balanced approach that combines both fiscal and monetary restraint, or will its efforts to reduce government expenditures prove disappointing and lead to continued heavy reliance on monetary policy? Only a heavy dose of fiscal restraint, incorporating major cutbacks in government expenditures, combined with tight monetary policy, can prove successful in curbing inflation over the long run, which in turn will lead to lower interest rates. While it will be difficult to attain substantial spending cuts in the current fiscal year, which is already one third over, it is essential that a proper tone be established quickly to reduce inflationary expectations and to ensure that the administration's commitment to reverse the trend toward larger government is credible.

Failure to achieve this balanced approach in fighting inflation would have severe consequences not only for the United States but also for the rest of the world. It could eventually lead to a further acceleration of U.S. inflation and to sustained high U.S. interest rates, which at some point could surpass their peaks of last year. Such a development would have a depressing effect on all other industrial countries, because they, too, would have to maintain high interest rates to support their currencies. This would reinforce the deflationary effects of oil price increases on real incomes and would lead to sustained economic sluggishness in the industrial world.

Maintenance of very high U.S. interest rates, along the lines of the British experience, moreover, would have serious repercussions for the

Table 5

External debt, gross interest payments, and net oil imports of twelve major non-oil LDCs in 1980

in billions of dollars

	Total external debt[1]	External debt owed to banks[2]	Gross interest payments		Net oil imports	
			Amount	% of exports[3]	Amount	% of exports[3]
Twelve major non-oil LDCs	$199	$120	$18.4	14%	$38.4	30%
Brazil	61.2	46.3	7.0	32	10.0	45
Argentina	21.4	19.0	2.8	29	0.8	7
Korea	27.0	15.7	2.5	11	5.6	25
Philippines	12.1	8.6	0.9	12	2.6	36
Chile	10.6	6.8	1.1	18	2.2	36
Thailand	7.0	5.1	0.6	6	2.7	27
Taiwan	7.5	5.6	0.8	4	4.5	20
Colombia	7.4	4.3	0.6	9	0.6	9
Turkey	19.9	3.7	1.1	21	2.9	55
Ivory Coast	4.1	3.0	0.4	12	0.3	9
Bolivia	2.6	1.5	0.2	20	0.0	0
India	18.5	1.0	0.4	4	6.3	58

1 All maturities estimated as of year-end.
2 BIS data.
3 Exports of goods and services.

Table 6

Twelve major non-oil LDCs[1]: the burden of oil imports and interest payments on external debt

	In billions of dollars		As % of exports of goods and services	
	Net oil imports	Interest payments	Net oil imports	Interest payments
1970	$1.0	$1.1	5.7%	6.2%
1971	1.5	1.3	7.7	6.7
1972	1.7	1.6	7.1	6.6
1973	2.4	2.0	6.7	5.6
1974	8.6	2.9	18.1	6.0
1975	9.1	3.8	19.1	7.9
1976	11.3	4.5	18.5	7.3
1977	12.8	5.6	16.9	7.4
1978	13.8	7.5	15.5	8.4
1979	22.0	11.8	19.9	10.8
1980	38.4	18.4	29.6	14.3
1981	40.0	23.5	27.5	16.0
1982	43		24	
10% LIBOR		19		11
15% LIBOR		28		16
20% LIBOR		37		21

1 See countries listed in Table 5.

management of exchange rates and the evolution of a multiple-currency reserve system. It could result in a further strengthening of the dollar, despite an adverse inflation differential, and to added pressures on a number of European currencies. For Germany, in particular, it could imply an even larger real depreciation of the mark than has already occurred. Faced with this situation, the German authorities could counter by taking "defensive" actions to restrict international transactions, as well as stepped-up foreign exchange market interventions. Informal restraints already have been placed on lending to nonresidents by German banks, along with a temporary cessation on certain foreign bond issues in Germany, and there have been suggestions of possibly restricting German tourist expenditures to reduce the large deficit on this account ($12 billion last year).

At the same time, there is a threat that sharp interest rate swings, or expectations of them, would lead to increased exchange-rate volatility. If there is to be an orderly development of a multiple-currency reserve system, divergences in inflation rates, interest rates, and monetary policies in general among the principal financial centers should be kept relatively narrow. In this regard, the expectation of more moderate U.S. inflation is vital to reduce interest rate swings and to ensure dollar stability.

Finally, as was noted in last month's issue, continued high U.S. interest rates would have severe consequences for the balance-of-payments financing prospects of the developing countries. As of end-1980, the twelve principal non-oil LDC borrowers had a total external debt outstanding estimated at about $200 billion, of which approximately 60% was owed to commercial banks, most of which is priced on a floating interest-rate basis (see Table 5). The sharp rise in rates brought interest payments on their external debt to $18 billion in 1980 from $12 billion in 1979. These could reach $24 billion this year if LIBOR averages 15% (see Table 6), a $12 billion increase from 1979 and equal to about one half of the projected $24 billion deterioration in these countries' combined current account deficit over this period. Next year, if LIBOR were to average about 15%, there would be a further $4-$5 billion jump in interest payments, which would probably necessitate some cutbacks in non-oil imports to prevent current account deterioration, even if oil prices were to stabilize in real terms. A 20% LIBOR average next year would result in interest payments only slightly below these countries' combined net oil import bills and would lead to further current account deterioration.

By comparison, the financing prospects of the LDCs would be enhanced considerably by a U.S. economic program that was effective in cutting the budget deficit and in reducing money-supply growth, inflation, and interest rates. For example, the difference between a successful anti-inflation policy that brought the LIBOR average down, say, to 10% next year, and an unsuccessful policy could be almost $18 billion in interest payments for the twelve LDCs next year. The ultimate cost of high U.S. inflation borne by the LDCs is considerably larger. It must take into account the effect on LDCs' import prices and also the adverse impact that high U.S. interest rates have on industrial country growth and, thus, on LDC export potential.

OPEC pricing

The OPEC pricing agreement announced last December in Bali has so far resulted in a 7.5% increase in the effective OPEC oil price. Including some further adjustments expected in the near term, prices could settle at around $37-$38 per barrel in the first quarter. For the rest of 1981 the outlook has improved somewhat. It is possible that with continued high production rates from Saudi Arabia, careful stock management in the industrial countries, and no intensification of hostilities between Iran and Iraq, oil prices can be contained to no more than $40 by year-end. This would imply an annual effective price on the order of $39 for 1981, a 23% increase from the nearly $32 per barrel of 1980, or over 10% in real terms.

At the Bali conference OPEC members made no attempt to unify prices. The new agreement, which will be reviewed again in May, effectively sanctioned the wide variation in official price levels that has prevailed since early 1979. OPEC members agreed to raise the maximum allowable official OPEC price and the price of the notional marker crude, used by some countries as a guide, by $4 per barrel, to $41 and $36, respectively. At the same time Saudi Arabia increased the price of its light oil (the traditional marker crude) by $2, to $32. This resulted in a widening of the range of permissible official OPEC prices, from $30-$37 to $32-$41. Within this range OPEC members were left free to choose their own official prices and also to add any premiums they wished.

Given the flexibility of the Bali agreement, the official prices now being set by OPEC members reflect mainly those of the market, adjusted for each country's particular situation. The new price increases fall predictably into three categories: a high one, of $4 per barrel, set by Libya, Kuwait, Qatar, and Iraq; a middle-of-the-road hike of around $3 per barrel chosen by Venezuela, Indonesia, Nigeria, and Algeria; and the low rise of $2 set by Saudi Arabia. Iran has also raised its price by $2, but from a level much higher than Saudi Arabia's so that its new price is $37. Most OPEC members also continue to add premiums ranging from $1 to $7 per barrel to their new higher official prices. Among non-OPEC countries, Mexico and Egypt have posted even larger increases of over $4 per barrel, while North Sea producers have opted for the middle-course rise of $3 per barrel.

The price increases announced so far suggest that the weighted average of all *official* OPEC prices may now be at slightly over $35 per barrel. Adjusting for premiums and spot sales, which are estimated to affect about 15% of OPEC production, the new *effective* OPEC price is $35.80 per barrel, versus $33.30 previously. While this 7.5% increase seems rather small, it is only so because of Saudi Arabia's high production and relatively low price levels. Excluding Saudi Arabia, the weighted average of the other twelve OPEC members' official prices is now $37.40 per barrel, up nearly 10% from December, while their effective price is on the order of $38 per barrel. The average for the non-OPEC oil exporters is also close to $38 per barrel.

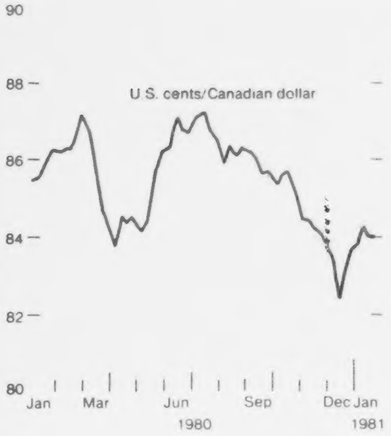
Oil prices for the first quarter of 1981 do not appear to have been fully settled, however. The widening of the differences among official OPEC prices that resulted from the Bali meeting, particularly the increase in the gap between the Saudi and the notional marker crude from $2 to $4, together with the absence of any OPEC agreement not to raise prices until the next meeting, suggests that further adjustments could take place in the near term. Influencing this view are primarily the $4 price increase by Kuwait, whose oil is heavier than most OPEC crudes and whose new official price of $35.50 is based on the marker of $36, and Iran's new price of $37 for oil of similar quality to Saudi Arabia's. Kuwait's increase has now been matched by Qatar and Iraq. These factors could lead Saudi Arabia to adjust its price upward to $34 or $36 before the next OPEC meeting, thus raising the effective OPEC price to around $37 per barrel. Should $4-per-barrel increases become even more prevalent in the Gulf, there could be further price rises by those non-Gulf OPEC members (such as Algeria, Venezuela, Nigeria, and Indonesia) which up to now have chosen increases of around $3. These adjustments would bring the effective OPEC price in the first quarter of 1981 to almost $38.

The oil price outlook for the rest of this year continues to be uncertain. With the conflict between Iraq and Iran unsettled, the oil demand-supply situation is likely to remain in a precarious balance, vulnerable to cuts in supplies or to threats of this happening. However, some encouraging developments have occurred recently in the oil market. If they continue they could moderate oil-price increases during the rest of 1981.

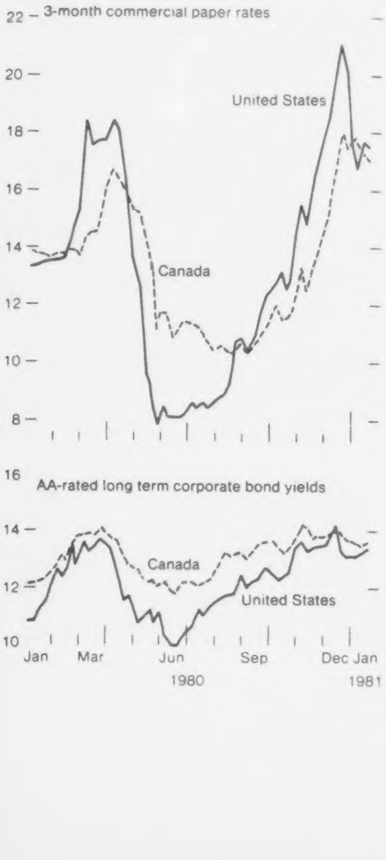
On the supply side, the situation is better now than it was at the start of the Iraq-Iran war. The two countries seem determined to maintain some level of oil exports, in spite of the conflict, and during the past month they have refrained from further destruction of each other's oil facilities. Recently, it was reported that Iran's oil exports were approaching the pre-war level of nearly 1 million bpd, and that Iraq's pipeline exports, which were interrupted in mid-December, had resumed. In addition, Saudi Arabia has decided to maintain the high oil-production rate of over 10 million bpd beyond the end of 1980. These favorable supply developments are matched on the demand side by continued declines in the industrial countries' oil consumption, which fell by 6%-7% in 1980, as a result of both weak economic growth and greater conservation. U.S. oil consumption at the turn of the year was down by about 4% from a year ago, in spite of much colder weather. Furthermore, industrial countries appear to be more willing than was originally expected to draw down their oil stocks, in part because of high interest costs. Thus, panic buying in the spot market has so far been avoided.

Taking into account the oil price rises already announced and those expected in the near term, and barring further destruction of oil facilities in Iraq and Iran, the continued extra oil supply from Saudi Arabia and careful management of oil stocks could keep the effective oil price to approximately $40 by the end of this year. Such a price scenario would maintain the 1981 OPEC current account surplus at around $110 billion before official transfers, a level roughly similar to last year's. In view of the unpredictability of export

Canadian dollar spot exchange rate
weekly averages



Canadian and U.S. interest rates
data in percent per annum



and import volumes from Iran and Iraq, the precise distribution of this year's surplus among OPEC members cannot be determined. It is reasonable to expect, however, that the bulk of the surplus will continue to be concentrated in Saudi Arabia as it is the only OPEC country that has substantially raised its production to make up for the reductions in Iran and Iraq. Also, its import growth this year may not be as rapid as that of the remaining OPEC members, especially those countries outside the Persian Gulf that for financial reasons had to cut back spending during the late 1970s. Thus, in spite of continued price moderation, Saudi Arabia may account for over 40% of the total OPEC surplus this year compared with 20% in 1979. An OPEC surplus of $110 billion in 1981 would bring total OPEC net external assets (public and private) to over $400 billion by year-end. Of this, two thirds would be held by three countries — Saudi Arabia, Kuwait, and Abu Dhabi — with Saudi Arabia holding more than half of this share.

If the effective oil price can be contained to about $40 by year-end, the industrial countries' 1981 current account deficit is likely to remain at roughly last year's level of almost $50 billion before official transfers. However, in view of the likelihood of an improvement in the current accounts of the United States and Japan, the aggregate 1981 deficit of the European countries will widen. The deficit of the non-OPEC LDCs may be up by about $10 billion to $80 billion before official transfers this year, mainly on account of higher interest payments, as discussed earlier, and sluggish growth in the industrial countries. The deficit of the twelve LDCs that are major borrowers may approach $50 billion, implying that commercial bank borrowings by these countries could rise by 20%-25%, a rate slightly below that of 1980.

The Canadian dollar

The Canadian dollar has recovered from its record low of 82.5 U.S.¢ reached in mid-December 1980, but at its current level of around 84¢ it remains below last year's average value of 85.5¢ (see chart). This weakness arises not only from the persistence of an unfavorable short-term interest rate differential *vis-à-vis* the United States (see chart), but also from the adverse effects of the Canadian federal government's National Energy Program (NEP) on the investment climate and energy prospects in Canada and from the erosion of confidence engendered by the escalating confrontation between the federal and provincial governments over energy policy and constitutional reform. Unfavorable shifts in payments leads and lags as well as in direct and portfolio investment contributed to net capital outflows on the order of $1 billion* in the fourth quarter of 1980.

This confluence of negative factors causing net capital outflows would have produced an even weaker Canadian dollar had it not been for a surprisingly strong trade and current account performance in recent months and for the Bank of Canada's strong resistance to significant exchange rate depreciation. The Bank of Canada, with the backing of the government, resisted depreciation by boosting domestic short-term interest rates considerably, although not as fast or as far as comparable rates in the United States, and by intervening in the foreign exchange market. Net intervention to support the Canadian dollar amounted to nearly $1 billion during the fourth quarter of last year. Officials have been anxious to avoid a substantial drop in the exchange rate for fear of exacerbating an already serious inflation problem.

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*All figures are in U.S. dollar terms unless otherwise noted.

Table 7

Canada's current account balance

in billions of dollars

	1978	1979	1980e
Exports	46.0	55.6	65.0
Imports	—43.0	—52.2	—58.0
Trade balance[1]	3.0	3.4	7.0
Food, feed, etc.	1.3	1.7	3.0
Energy	1.4	2.8	2.3
Other materials[2]	10.0	11.9	15.2
End products	—10.4	—13.8	—14.4
Invisibles balance	—7.6	—7.8	—8.3
Travel	—1.5	—0.9	—0.8
Interest and dividends	—3.9	—4.5	—5.0
Other	—2.2	—2.4	—2.5
Current account	—4.6	—4.4	—1.3

e Estimate.

[1] Includes special transactions and re-exports which are excluded from the components.

[2] Inedible crude and fabricated materials other than energy commodities.

Table 8

Canada's energy trade balance[1]

in billions of dollars

			Jan-Oct	
	1978	1979	1979	1980
Oil[2]	—1.1	—0.5	—0.3	—1.8
Natural gas	1.9	2.6	1.9	2.8
Coal	0.1	—0.*	0.0	0.1
Electricity	0.4	0.6	0.5	0.5
Total	1.4	2.8	2.1	1.6

* Less than $100 million.

[1] Annual data on balance-of-payments basis; January-October data on customs basis.

[2] Includes crude oil and petroleum products.

Current account performance

Canada's current account balance swung into a surplus estimated at approximately $1½ billion at a seasonally adjusted annual rate in the second half of 1980, from an annual rate deficit of more than $3 billion in the first half and a deficit of nearly $4½ billion in 1979. This improvement was entirely due to a strong rise in the merchandise trade surplus, which more than doubled to $7 billion in 1980 (see Table 7). Canada's large net invisibles deficit continued to widen, reaching an estimated $8.3 billion last year. The large gain in the trade surplus was particularly surprising in view of the weakness of economic activity in the United States, which is the market for more than two thirds of Canada's exports.

Several factors contributed to this strong trade performance. First, Canadian domestic economic activity was weaker than activity in the United States and other major trading partners. Real GNP declined by an estimated 0.3% last year — the first full-year drop in more than twenty-five years — versus a weighted average 0.3% increase in the real GNP of Canada's major trading partners. There was a marked slowing in machinery and equipment investment and a drop in consumer durable expenditures, both of which have a high import content. Import volume declined by 7.1% in the first three quarters of 1980 versus a 3.3% drop in export volume.

Second, Canada's trade performance also benefited from the relatively strong competitive position that Canadian manufacturers had achieved by 1979 as a consequence of previous Canadian dollar depreciation. The real effective exchange rate of the Canadian dollar, whether measured on the basis of wholesale manufactures prices or unit labor costs in manufacturing, declined substantially after 1976, reaching levels by the end of 1980 that were 15.5% and 22%, respectively, below those in 1976 (see chart). The full effects of this improved competitive position did not show up in Canada's trade performance until 1980, partly because capacity limitations in a number of export and import-substituting industries prevented Canadian producers from taking full advantage of their enhanced competitive position. Last year, with additions to capacity coming on stream and with a softening of domestic demand, these capacity constraints eased significantly and Canadian producers were able to boost their market shares.

Third, Canada's terms of trade also improved substantially between the first quarters of 1979 and 1980, largely as a consequence of a sharp run-up in prices of export commodities such as metals, newsprint, and grains. Although some of these earlier gains were subsequently reversed, for 1980 as a whole the terms of trade improved by approximately 1½% from 1979.

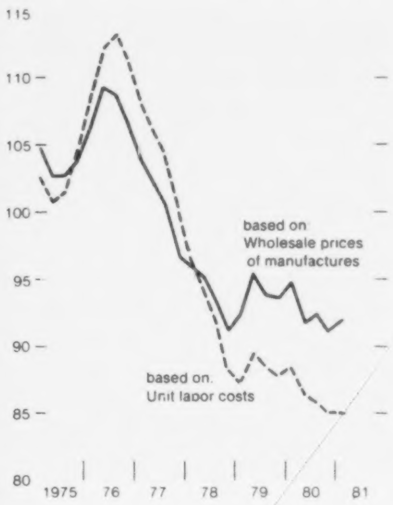
Fourth, Canada's high degree of self-sufficiency in energy has largely insulated its balance of payments from the unfavorable impact of sharply higher world oil prices. Canada's net imports of oil and products rose from 114,000 bpd in 1979 to an estimated 180,000 bpd last year because of reduced domestic production, but the impact of this increased net import volume and higher world oil prices was cushioned by the large rise in value of Canadian exports of natural gas to the United States and gains in net exports of electricity and coal (see Table 8).

Current account outlook

Canada's trade and current ac-

Canadian dollar real effective exchange rates

quarterly averages except latest plotting index, 1975-1979 100



count performance is likely to deteriorate next year and, thus, will not provide the measure of support to the Canadian dollar that was so important in the latter part of 1980. The trade surplus could easily decline by $1 billion or more from last year's record $7 billion level, and increased net payments of interest and dividends as well as other services could raise the net invisibles deficit to $9 billion this year, implying a current account deficit of $3 billion or more.

The anticipated decline in the trade surplus this year could arise from a slightly less favorable cyclical situation, a modest worsening in the terms of trade, and a probable deterioration in the energy trade balance. The sluggish upturn in domestic economic activity that began after the 1980 first-half recession is likely to extend into 1981. However, real GNP may increase by only about 1% this year. This is roughly in line with expectations for the U.S. economy, but economic activity in Europe, especially in the first half of the year, is likely to be much weaker. Canada's stake in rapidly growing OPEC markets is quite small. Thus, the volume of export growth could lag that of imports this year.

The modest deterioration in the terms of trade that occurred in the latter part of 1980 is likely to continue at least through the first half of this year. The prices for most resource materials (other than energy), of which Canada is a large net exporter, are likely to be fairly soft, whereas the prices of manufactures, of which Canada is a large net importer, will continue to rise rather strongly given continued high inflation in the United States and certain other suppliers.

Canada's energy trade balance could also deteriorate again this year. Natural gas export volume is likely to recover only part of the ground lost in 1980 when overpricing (and ample supplies in the United States) led to a 20% drop in the quantity of shipments. This is especially true now that the Canadian government has announced its intention to raise the export price by a further 12% on April 1. The volume of net oil imports could increase to more than 200,000 bpd because of a decline in conventional oil production as well as a temporary loss of productive capacity in the country's largest synthetic oil plant, while the price of imported oil is expected to average some 25% above last year's level. If Alberta's failure to resolve its dispute with the federal government over energy prices and revenues shares were to result in implementation of Alberta's threatened reduction in provincial oil production (by up to 180,000 bpd in three stages beginning March 1), Canada's oil import bill could rise above 300,000 bpd.

Inflation prospects

There is likely to be some erosion in Canada's cost competitiveness this year, but it probably will not be sufficient to affect trade performance materially. Nevertheless, recent trends bear watching since they suggest that inflation in Canada will accelerate further in 1981, overtaking the U.S. inflation rate. The emergence of an unfavorable inflation differential *vis-à-vis* the United States could take the edge off any renewed confidence in the Canadian dollar that may result from more favorable interest rate differentials.

Consumer prices increased 11.2% in the year to December 1980, and they are expected to rise by 11½%-12% this year. Actual hourly earnings in manufacturing rose nearly 10% last year and could rise by 10½% in 1981. Combined with poor productivity, these earnings gains resulted in unit-labor-cost increases of more than 12% last year. These could be close to 11% this year.

Despite slack in the economy and a restrictive monetary policy, a significant reduction of inflation seems unlikely in the medium term. The government, itself, projects that consumer price inflation will average 9% per year during 1981-85. Inflation expectations are firmly entrenched and will be difficult to diminish, especially since the country faces the certainty of sizable domestic energy price increases for many years to come as it moves gradually toward higher world market levels. The government's fiscal policy has done little to curb inflation expectations, with federal outlays projected to rise faster than nominal GNP this year and next, despite promises to the contrary. A significant slowing of government expenditure growth is projected for later in the 1980s, but it appears that this will depend heavily on the federal government's ability to shift part of the burden of social programs to the provinces in forthcoming negotiations over federal-provincial fiscal arrangements. The federal government's financing requirements remain large: C$12.2 billion (4.3% of GNP) in the current fiscal year ending next March, and C$11 billion (3.5% of GNP) in the 1981/82 fiscal year.

Energy policy

The National Energy Program (NEP) proposed by the federal government last October addresses a whole gamut of energy issues. In attempting to achieve multiple objectives, not all of which are consistent, the government appears to have put a high priority on three of them: (1) cushioning domestic energy consumers from the full brunt of world oil prices apparently with the intention of retaining a competitive cost advantage for Canadian industry, containing inflation, and avoiding a sudden redistribution of income between the oil-producing and oil-consuming provinces; (2) alleviating its own fiscal problems by greatly increasing the federal government's share of revenues from oil and gas production; and (3) increasing Canadian ownership and control of the oil and gas industry. It seems that these priorities are to be pursued at the expense of maximizing potential improvement in the domestic energy demand and supply balance, international efforts to reduce dependence on Middle East oil, domestic economic growth, and the balance of payments and the Canadian dollar.

One key element of the NEP is a long-term energy pricing policy that establishes a "made in Canada" oil price — a blended price to the refiner of imported and domestic oil — that will be gradually raised during the 1980s to a level not exceeding 85% of the price of crude oil in the United States or internationally, whichever is lower. The blended price to the refiner was raised to C$22.80 per barrel ($19.40) on January 1, 1981, and according to the proposed schedule it will reach only C$32.80 ($27.90) by the end of 1983, which would still be about 25% below the current average OPEC price and perhaps as much as 40%-50% below the world price level at that time. Natural gas prices are to rise more slowly — by 1983 they will be 67% of the oil equivalent, down from 80% at present — in order to provide an incentive for energy users to switch from oil to gas. The relatively slow pace of the upward adjustment of domestic oil price levels during the coming years will restrain progress toward the government's own goal of reducing domestic oil consumption and stimulating domestic oil production — particularly the latter, since more than half of the scheduled increase in the blended price consists of an escalating petroleum compensation charge rather than higher wellhead prices, which benefit the producer.

Another important element of the NEP is a sharp increase in the federal government's share of oil and gas revenues from the present 10% to more than 25% by 1983, largely at the expense of the oil and gas industry and, to a lesser extent, of the producing provinces, notably Alberta. The taxes imposed by the federal government to accomplish this, especially an 8% tax on net oil and gas production revenues, will significantly reduce the petroleum industry's cash flow.

Perhaps the most disturbing aspect of the NEP is the proposal to "Canadianize" the oil and gas industry — to increase Canadian ownship and control of oil and gas production from less than 30% at present to at least 50% by 1990. This is to be accomplished in part by phasing out depletion allowances and replacing them with a complex schedule of direct incentive payments that vary according to the degree of Canadian ownership and control of each well. In addition, the federal government will automatically be given a 25% carried interest, without compensation, in every lease or right on federal lands. The government has also announced its intention to acquire the Canadian assets of one or more foreign oil companies.

Implications of the NEP

Reaction to the NEP has been negative. Initially there was a large sell-off of Canadian shares by foreign investors. The provincial government of Alberta has held up approval of two major oil sands projects in the province and has threatened to cut provincial oil production by up to 180,000 bpd later this year. A number of oil companies, facing reduced cash flows, less attractive investment returns, and increased uncertainty, have announced sizable cutbacks in planned exploration and development expenditures. There have been numerous reports of drilling rigs being idled and of money and equipment moving south of the border, where potential returns are much higher. Questions are being raised about the viability of a number of major projects involving oil sands plants and the commercial exploitation of oil and gas discoveries in frontier and offshore areas, all of whose timely development is crucial to Canadian energy supplies in the second half of the 1980s.

Failure to make sufficient changes and compromises in the government's energy program to resolve the dispute between Ottawa and Alberta and to satisfy at least some of industry's complaints would have serious implications. Prior to the NEP, Canada's dependence on imported oil had already been expected to grow over the next four-to-five years because of the likely decline in production from older oil fields in western Canada. In the aftermath of the NEP, however, several recent reassessments of Canada's energy prospects suggest that domestic oil production and conservation could lag even more than previously expected. Net oil imports, these analyses suggest, could double or triple from last year's estimated 180,000 bpd to between 400,000 and 600,00 bpd by 1985. Chances of reaching the government's goal of oil self-sufficiency by 1990 are virtually ruled out. Improvement in the oil demand/supply balance beyond the mid-1980s depends on further cuts in consumption and especially on production increases from new oil sands capacity, development of offshore discoveries, and employment of advanced recovery methods, all of which have been put in jeopardy.

The NEP, which risks greatly increasing Canada's dependence on imported oil rather than moving the country toward self-sufficiency, runs directly contrary to the interests of all other oil-importing countries in reducing the world's dependence on Middle East oil. Canada, by failing to maximize its own potential for reducing consumption and for expanding production from its huge petroleum resources, increases everyone's vulnerability to supply interruptions and contributes to higher world oil prices.

In addition to the negative consequences of higher net oil imports for Canada's trade balance, the NEP and particularly its Canadianization aspect could have a significant adverse impact on capital flows in the medium term. The government's purchase of the Canadian assets of one or more foreign oil companies could entail sizable capital outflows unless financed by foreign borrowing. Moreover, in running the risk of discouraging new foreign investment, Canada could worsen the already substantial net outflows of direct investment capital. These net outflows have averaged $1.2 billion annually in the past three years, as Canadian investment abroad and withdrawals of foreign investors from Canada have exceeded new foreign direct investment flows into Canada.

Economic growth may also suffer. Energy-related investment has been looked to as a major driving force behind economic growth over the next several years. Much of this investment has now been put in doubt. The NEP, in discouraging foreign investment and in diverting domestic savings into the acquisition of foreign oil companies, also risks worsening the country's capital shortage. Moreover, whatever benefit Canadian industry may derive from cheap energy, in the short run it could lead to criticism from trading partners as an unfair subsidy, and in the long run it could dull the competitiveness of Canadian industry.

Closely linked to the dispute over energy policy is the confrontation between the federal and provincial governments over Prime Minister Trudeau's plans for constitutional reform. Like the controversial energy policy, the government's unilateral attempt to amend and patriate the constitution from Britain has provoked strong expressions of regional discontent as well as court challenges. Even separatist sentiment has been aroused, in the west as well as in Quebec.

Unresolved constitutional and energy matters as well as the prospect of a moderate deterioration in Canada's current account and inflation differential, suggest that the Canadian dollar is likely to remain relatively weak, even if interest rate differentials become more favorable. Interest rate movements in Canada may well lag a decline in U.S. rates, especially given the authorities' determination to resist further exchange rate depreciation. However, unless energy policy is straightened out, with favorable implications for Canada's longer-run current account prospects and for the restoration of the Canadian dollar's potential as a "petro-currency," it is unlikely that the Canadian dollar will break out of its relatively narrow trading range of the past two years.

Statistical appendix

for key to data in tables see pages 22 and 23.

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Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

Effective exchange rates

Index numbers, March 1973=100. The index of the effective exchange rate for a currency is a measure of that currency's trade-weighted average appreciation or depreciation vis-à-vis the currencies of 15 other major countries. The exchange rates used in the construction of this index are the averages of daily noon spot exchange rates in New York for months and for weeks ending on dates shown. The trade weights used are based on 1976 bilateral trade in manufactures.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
pre-June 1970 parities	118.5	94.9	79.3	116.2	91.6	97.5	110.9	95.9	98.2	88.3	97.8	97.9	98.1	102.2	92.2	98.4
Smithsonian central rates	107.0	101.3	88.7	116.0	95.4	96.1	108.3	97.0	99.1	91.6	98.0	96.0	96.3	100.5	91.7	98.1
1980																
January	97.9	84.3	104.2	75.6	139.9	91.0	54.4	110.4	119.4	166.6	121.6	93.5	101.8	87.9	73.9	75.2
February	98.4	85.0	101.7	77.2	139.3	90.5	54.6	110.0	119.1	163.4	121.7	92.9	103.2	88.0	74.2	75.3
March	101.3	84.3	101.9	77.4	137.8	90.2	53.9	109.6	118.7	159.1	121.4	91.7	104.2	88.2	75.1	75.5
April	102.3	83.4	101.6	78.2	137.1	90.3	53.4	109.9	118.1	161.1	121.0	91.2	104.6	88.4	75.5	73.3
May	98.4	83.6	109.4	78.6	138.1	90.3	53.3	110.6	118.2	163.7	121.4	91.5	103.5	88.1	74.8	71.5
June	96.2	84.9	113.8	78.7	137.9	90.6	53.1	110.8	118.6	164.3	121.7	92.0	103.0	87.8	74.8	71.4
July	96.0	84.8	111.7	79.3	138.2	91.1	52.7	110.9	119.1	165.5	122.2	92.5	102.8	87.8	75.1	70.0
August	97.2	84.5	111.1	80.5	137.2	90.7	52.7	110.2	119.0	163.8	122.0	91.8	103.3	88.2	75.7	69.6
September	96.4	83.9	115.8	81.4	137.0	90.4	52.4	109.9	119.1	164.7	121.8	91.4	103.3	88.2	75.4	68.4
October	96.8	83.6	119.4	83.2	135.4	89.9	52.0	109.1	118.3	165.5	121.0	90.5	103.2	88.7	75.4	68.3
November	98.9	82.7	118.8	84.9	134.3	89.0	51.7	108.3	117.7	164.5	119.9	89.5	103.6	89.0	76.1	68.6
December	99.9	82.2	122.0	84.8	133.9	88.7	51.4	107.8	117.0	162.5	119.8	89.4	102.6	88.9	76.6	67.5
5	99.8	82.4	118.9	84.0	134.2	88.9	51.5	108.2	117.8	163.9	120.0	89.7	103.2	88.9	76.6	68.2
12	99.6	82.1	122.4	84.9	133.2	88.6	51.6	107.6	116.8	162.1	119.5	89.1	102.7	89.0	76.7	68.1
19	100.5	81.7	122.8	84.8	133.8	88.5	51.3	107.7	116.9	161.9	119.5	88.7	102.9	88.8	76.6	67.4
26	99.2	82.3	122.7	84.6	134.1	88.9	51.4	107.9	117.2	162.5	120.4	89.4	101.8	90.0	76.4	67.1
1981																
January 2	98.9	82.4	125.4	85.6	133.6	88.7	51.5	107.6	117.0	162.7	120.1	89.2	101.6	88.9	76.2	66.9
9	98.2	82.5	126.7	86.3	133.7	88.8	51.2	107.8	116.9	162.4	119.8	88.8	101.9	88.7	76.2	66.6
16	99.3	82.5	126.2	87.2	133.2	88.4	51.0	107.3	116.3	161.3	119.6	88.2	102.3	88.7	76.6	66.6
23	99.3	82.5	127.5	88.1	132.6	88.1	51.2	107.3	116.2	160.5	119.6	88.1	101.6	88.8	76.4	66.7

Real effective exchange rates

Index numbers, March 1973=100. The index of the real effective exchange rate is the index of the effective exchange rate adjusted for inflation differentials which are measured by wholesale prices of nonfood manufactures. Exchange rates and trade weights used in the construction of this index are the same as those used for effective exchange rate indices. Annual figures are averages of months.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
1977	100.1	99.8	93.7	101.7	102.7	96.6	92.4	100.0	104.0	105.7	109.6	97.5	99.8	105.2	92.0	101.4
1978	95.4	92.9	107.5	106.5	103.4	97.3	90.9	99.9	103.9	122.4	109.7	103.7	95.6	96.7	87.3	97.3
1979	95.6	92.9	96.2	118.9	104.2	99.2	90.7	97.3	100.5	115.7	108.5	101.8	90.5	99.4	86.1	109.4
1980	97.8	91.6	93.9	137.1	101.2	101.0	92.0	92.2	97.9	105.5	108.7	93.7	91.7	101.3	87.9	106.9
1980																
January	95.6	94.9	87.1	128.6	104.5	99.9	93.1	94.9	100.1	110.4	109.7	95.7	89.2	100.4	85.5	112.4
February	96.7	94.6	85.3	131.8	103.5	99.9	93.8	94.0	99.3	107.3	110.2	94.8	92.5	101.0	87.0	112.3
March	100.2	92.2	86.5	132.9	102.0	100.3	92.5	93.0	98.6	104.0	109.4	94.2	93.1	101.4	87.5	111.5
April	101.8	90.5	87.0	134.3	101.4	100.4	92.0	92.9	98.6	105.0	108.3	93.5	93.2	100.8	87.1	107.4
May	97.9	90.4	94.0	136.0	102.1	100.3	92.8	93.5	97.1	106.3	109.3	94.2	92.7	100.5	86.1	104.9
June	95.7	91.9	97.8	137.3	101.8	100.4	92.9	93.4	97.0	105.9	109.7	94.3	91.7	100.3	86.0	105.9
July	95.9	91.7	95.1	138.5	101.4	101.3	92.8	92.9	97.9	106.1	110.4	96.0	92.0	100.1	86.9	104.4
August	97.0	91.3	94.7	140.3	100.6	101.6	92.9	91.6	97.8	104.4	109.9	95.7	91.8	100.7	88.3	104.4
September	95.4	91.6	98.6	142.3	100.0	101.5	93.3	92.0	97.6	104.6	109.5	94.1	92.6	101.0	88.3	103.3
October	96.8	91.0	99.9	144.7	98.9	101.3	92.7	91.1	96.6	104.8	108.4	93.4	93.1	101.3	88.7	103.7
November	99.0	90.1	98.6	147.3	97.5	100.5	93.8	90.2	96.0	104.6	107.0	92.6	93.7	101.8	90.2	104.8
December	100.1	89.6	101.0	146.7	96.9	100.5	93.5	89.9	95.3	103.0	106.9	92.2	93.3	101.8	91.2	103.9

Euro-currency market size

based on foreign-currency liabilities and claims of banks in major European countries, the Bahamas, Bahrain, Cayman Islands, Panama, Canada, Japan, Hong Kong, and Singapore
billions of dollars (rounded to nearest $5 billion), at end of period

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	
										Jun	Sep[p]
Estimated size											
Gross	150	205	310	390	480	590	725	925	1 185	1 310	1 370
Liabilities to nonbanks	30	35	55	75	80	100	125	170	230	265	n.a.
Liabilities to central banks	15	25	40	60	70	85	110	120	155	160	n.a.
Liabilities to other banks[a]	105	145	215	255	330	405	490	635	800	885	n.a.
Net	85	110	160	215	250	310	380	485	600	670	700
Claims on nonbanks	35	45	65	100	115	150	195	245	295	340	n.a.
Claims on central banks and on banks outside market area[b]	35	45	75	95	115	135	155	195	245	260	n.a.
Conversions of Euro funds into domestic currencies by banks in market area[c]	15	20	20	20	20	25	30	45	60	70	n.a.
Euro-dollars as % of gross liabilities in all Euro-currencies	76	78	73	77	78	79	76	74	72	72	n.a.

a Includes unallocated liabilities
b Includes unallocated claims
c In European market area only
r revised
p preliminary

Euro-currency deposit rates

prime banks' bid rates in London, at or near end of month

	1977	1978	1979	1980							
	Dec	Dec	Dec	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Euro-dollar:											
overnight	7.12	10.62	14.00	9.37	9.50	9.12	10.50	12.50	13.25	18.50	19.25
7-day fixed	6.31	10.62	14.00	9.50	9.50	9.25	10.62	12.50	13.50	18.50	19.75
one month	6.87	11.00	14.37	9.87	9.50	9.50	11.19	13.19	14.50	18.37	19.12
three months	7.19	11.69	14.44	10.12	9.75	9.81	12.25	13.81	15.37	18.06	17.62
six months	7.50	12.31	14.44	10.25	9.94	10.06	12.50	13.94	14.87	16.87	16.75
twelve months	7.67	12.00	12.87	10.25	9.87	10.19	12.50	13.69	14.12	15.50	14.87
Euro-mark:											
one month	2.19	3.19	8.50	9.37	9.50	8.69	8.62	8.87	8.81	9.69	8.87
three months	2.50	3.31	8.56	9.37	9.37	8.25	8.50	8.87	8.94	9.56	8.87
six months	2.81	3.69	8.56	9.00	8.81	7.81	8.31	8.87	8.81	9.31	8.87
twelve months	3.06	3.81	8.12	8.50	8.19	7.75	8.12	8.69	8.56	9.37	8.93
Euro-Swiss franc:											
one month	1.31	—.06	5.19	5.56	5.62	5.06	6.00	5.25	4.12	6.12	6.00
three months	1.37	0.00	5.75	5.37	5.69	5.12	5.87	5.75	5.44	6.12	6.00
six months	1.87	0.12	5.87	5.37	5.69	5.25	5.75	5.75	5.12	6.12	5.75
twelve months	2.25	0.62	5.56	5.25	5.12	5.00	5.50	5.62	5.37	6.19	5.50
Euro-sterling:											
one month	6.50	12.00	16.75	17.00	17.37	16.87	16.75	16.25	17.00	14.50	14.75
three months	6.62	12.62	16.75	16.75	16.75	15.62	16.62	15.87	16.75	14.62	14.75
six months	7.12	13.25	16.75	16.12	15.25	14.25	16.25	15.00	16.12	14.44	14.25
twelve months	7.37	13.00	15.25	14.75	14.00	13.25	15.12	14.37	15.00	14.00	14.00
Euro-French franc:											
one month	12.25	10.50	13.87	12.31	12.25	12.37	12.00	11.62	11.00	10.50	11.12
three months	13.25	9.87	14.00	12.50	12.25	12.12	12.12	12.06	11.31	11.37	11.75
six months	14.00	9.87	14.12	12.62	12.25	12.00	12.37	12.56	12.00	12.37	12.25
twelve months	13.25	10.25	13.75	12.75	12.25	11.94	12.62	12.81	12.62	13.00	12.87
Euro-yen:											
one month	0.62	—.69	7.62	12.62	13.00	12.87	11.62	12.50	10.00	10.25	9.12
three months	1.81	0.62	8.31	12.25	12.25	12.25	11.62	12.25	9.62	10.12	9.25
six months	2.75	1.87	8.62	11.37	11.12	11.37	11.12	11.50	9.12	10.12	9.62
twelve months	3.25	2.19	7.94	10.25	9.37	9.75	9.75	10.50	9.00	9.37	9.37

Euro-currency bank credits

publicly-announced in period, in millions of dollars

	1978	1979	1980	1980			Jan[p]	
				Oct[r]	Nov[r]	Dec[r]	1981	1980
Industrial countries	**28 952**	**27 248**	**39 703**	**5 496**	**4 541**	**6 566**	**5 132**	**1 517**
Australia	212	941	2 475	1 469	—	—	50	—
Canada	5 705	1 845	1 743	—	1 086	—	—	—
Denmark	2 242	1 205	1 670	10	106	5	200	—
Finland	550	92	1 040	—	—	—	65	—
France	1 915	2 955	1 745	—	183	—	75	—
Greece	509	1 010	1 333	18	79	—	75	—
Ireland	616	687	237	20	106	—	—	—
Italy	2 485	3 708	6 593	1 425	86	439	2 320	365
Norway	1 517	935	685	129	125	—	10	27
Spain	2 426	4 184	5 435	1 041	510	948	604	443
Sweden	1 872	1 263	1 720	162	350	—	1 052	88
United Kingdom	3 899	795	1 470	312	60	—	—	230
United States	1 206	2 348	6 719	440	100	4 320	350	234
Other[a]	3 798	5 280	6 838	470	1 856	854	331	130
Developing countries	**37 290**	**47 964**	**34 944**	**4 358**	**4 192**	**1 841**	**2 613**	**1 408**
Non-OPEC countries	26 892	35 225	23 445	3 315	3 486	1 300	2 319	819
Argentina	1 461	2 965	2 506	550	160	130	250	—
Brazil	5 634	6 278	4 158	396	1 358	25	260	—
Chile	1 045	867	1 317	266	124	178	150	23
Korea	2 651	3 258	1 917	6	617	95	128	262
Malaysia	858	1 168	—	—	—	—	—	—
Mexico	7 250	8 243	5 971	985	94	450	730	—
Morocco	605	500	420	170	—	—	140	—
Peru	—	596	480	90	—	55	—	—
Philippines	2 073	2 067	971	265	165	—	76	200
Taiwan	255	1 063	314	5	—	—	—	—
Other[b]	5 060	8 220	5 391	582	968	367	585	918
OPEC countries	10 398	12 739	11 499	1 043	706	541	294	589
Algeria	2 576	1 906	40	—	—	—	—	—
Indonesia	1 118	1 061	1 435	167	8	400	—	99
Nigeria	825	1 373	1 330	663	54	—	75	95
United Arab Emirates	726	401	101	1	39	1	—	55
Venezuela	2 054	6 830	6 715	62	605	123	155	120
Other	3 099	1 168	1 878	150	—	17	61	220
Communist countries	**3 767**	**7 325**	**2 809**	**681**	**42**	**200**	**250**	—
China	—	3 395	181	—	42	—	—	—
East Germany	642	796	303	181	—	—	250	—
Hungary	700	260	550	330	—	—	—	—
Poland	374	849	800	—	—	—	—	—
Other[c]	2 051	2 025	975	200	—	200	—	—
International organizations	**160**	**275**	**429**	**20**	—	—	—	—
TOTAL	**70 169**	**82 812**	**77 885**	**10 555**	**8 775**	**8 607**	**7 995**	**2 925**

[a] includes multi-national organizations [b] includes regional development organizations [c] includes COMECON institutions [p] preliminary
[r] revised

International bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980						
	Dec	Dec	Dec	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
U.S. companies:											
U.S. dollar	7.95	8.55	10.13	10.39	9.83	9.99	10.60	10.73	11.27	11.46	11.76
Swiss franc	5.31	5.70	6.61	7.23	7.29	7.28	7.30	7.28	7.26	7.38	7.27
European companies:											
U.S. dollar	8.42	9.21	10.93	11.07	10.53	10.72	11.47	11.71	12.04	12.23	12.42
German mark	6.80	6.84	7.55	7.84	7.76	7.63	7.85	8.31	8.66	8.82	8.79
Governments:											
U.S. dollar	8.42	9.12	10.66	11.06	10.47	10.50	10.90	11.08	11.22	11.27	11.83

New international bond issues

new issues in period, in millions of dollars

	1978	1979	1980	1980			Jan	
				Oct	Nov	Dec	1981	1980
By type:								
Euro-bonds, total	**14 125**	**18 726**	**23 879**	**3 082**	**1 690**	**1 494**	**2 831**	**1 135**
by category of borrower								
U.S. companies	1 122	2 872	4 100	755	392	207	450	114
Foreign companies	4 540	7 183	9 032	1 089	982	672	748	310
State enterprises	3 291	4 524	5 755	933	116	233	822	293
Governments	3 043	2 433	3 045	257	20	219	646	378
International organizations	1 529	1 714	1 947	48	180	163	165	40
by currency of denomination								
U.S. dollar	7 290	12 565	16 340	2 330	1 047	1 151	2 430	370
German mark	5 251	3 626	3 607	450	250	63	—	551
Dutch guilder	394	531	1 050	67	140	28	49	39
Canadian dollar	—	425	279	—	—	—	—	—
European unit of account	165	253	65	28	—	—	32	—
Other	1 025	1 326	2 538	207	253	252	320	175
Foreign bonds outside the United States, total	**14 359**	**17 749**	**14 521**	**1 261**	**1 623**	**850**	**1 046**	**2 095**
by category of borrower								
U.S. companies	245	217	307	—	88	—	—	—
Foreign companies	2 110	3 463	3 157	378	568	274	469	147
State enterprises	3 163	3 284	2 830	330	342	177	290	132
Governments	5 771	7 663	4 086	120	302	52	179	1 533
International organizations	3 070	3 122	4 141	433	323	347	108	283
by currency of denomination								
German mark	3 789	5 379	4 839	281	237	252	5	1 359
Swiss franc	5 698	9 777	7 617	636	1 119	505	883	542
Dutch guilder	385	75	259	75	—	—	45	—
Japanese yen	3 826	1 833	1 088	48	259	—	98	84
Other	671	685	718	221	8	93	15	110
Foreign bonds in the United States, total	**5 795**	**4 515**	**3 429**	**1 000**	**205**	**220**	—	**522**
by category of borrower								
Canadian entities	3 142	2 193	2 136	800	191	—	—	200
International organizations	459	1 100	550	200	—	—	—	250
Other	2 194	1 222	743	—	14	220	—	72
By country of borrower:								
Industrial countries	**24 964**	**31 886**	**32 641**	**4 336**	**2 920**	**1 809**	**3 544**	**3 117**
Australia	1 218	593	539	29	39	—	—	—
Austria	1 027	1 218	1 859	158	61	142	192	144
Canada	4 764	4 197	3 797	935	205	148	360	328
Denmark	1 018	752	1 125	58	94	17	—	176
Finland	952	699	392	27	—	—	5	39
France	1 286	2 106	2 729	385	417	140	545	196
Japan	3 467	5 775	5 309	544	958	401	502	255
Netherlands	251	832	1 592	216	140	56	49	8
New Zealand	744	553	293	25	—	—	598	—
Norway	2 751	1 955	892	44	35	123	40	165
Sweden	876	1 530	3 244	312	152	429	201	332
United Kingdom	1 365	1 181	1 733	293	100	—	100	—
United States	2 973	6 767	5 580	755	480	207	450	1 287
Developing countries	**4 227**	**3 093**	**2 485**	**326**	**95**	**245**	**30**	**62**
Non-OPEC countries	2 684	2 675	1 942	245	95	245	30	62
Brazil	843	930	349	—	—	—	—	—
Mexico	568	363	544	125	—	105	—	37
Philippines	170	175	70	—	—	—	—	—
OPEC countries	1 543	418	543	81	—	—	—	—
Algeria	721	208	—	—	—	—	—	—
Venezuela	588	55	398	81	—	—	—	—
Communist countries	30	75	65	—	—	—	30	—
Hungary	—	—	65	—	—	—	—	—
International organizations	**5 058**	**5 936**	**6 638**	**681**	**503**	**510**	**273**	**573**
TOTAL	**34 279**	**40 990**	**41 829**	**5 343**	**3 518**	**2 564**	**3 877**	**3 752**

Central bank discount rates

	1977	1978	1979	1980				Current	
	end Dec	end Dec	end Dec	end Mar	end Jun	end Sep	end Dec	Jan 28 1981	effective since
United States	6.00	9.50	12.00	16.00[a]	11.00	11.00	13.00	13.00	Dec 5, 80
Canada	7.50	10.75	14.00	14.19	11.83	11.20	17.36	16.97	Jan 16, 81
Japan	4.25	3.50	6.25	9.00	9.00	8.25	7.25	7.25	Nov 5, 80
United Kingdom	7.00	12.50	17.00	17.00	17.00	16.00	14.00	14.00	Nov 25, 80
Belgium	9.00	6.00	10.50	14.00	13.00	12.00	12.00	12.00	Jul 31, 80
France	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	3.00	3.00	6.00	7.00	7.50	7.50	7.50	7.50	May 2, 80
Italy	11.50	10.50	15.00	15.00	15.00	16.50	16.50	16.50	Sep 29, 80
Netherlands	4.50	6.50	9.50	9.50	9.50	8.50	8.00	8.00	Oct 21, 80
Austria	5.50	4.50	3.75	6.75	6.75	6.75	6.75	6.75	Mar 21, 80
Denmark	9.00	8.00	11.00	13.00	13.00	12.00	11.00	11.00	Oct 27, 80
Finland	8.25	7.25	8.50	9.25	9.25	9.25	9.25	9.25	Feb 1, 80
Ireland	6.75	11.85	16.40	16.85	16.85	13.50	12.75	12.75	Oct 10, 80
Norway	6.00	7.00	9.00	9.00	9.00	9.00	9.00	9.00	Nov 30, 79
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	Jul 26, 77
Sweden	8.00	6.50	9.00	10.00	10.00	10.00	10.00	12.00	Jan 20, 81
Switzerland	1.50	1.00	2.00	3.00	3.00	3.00	3.00	3.00	Feb 28, 80
Argentina	165.27	108.19	89.90	74.98	85.86	69.64	87.01	87.01	Dec 26, 80
Brazil	28.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	Jul, 78
Korea	14.00	14.50	14.50	20.50	19.50	17.50	15.50	15.50	Nov 11, 80
New Zealand	10.00	10.50	13.00	13.00	13.00	14.00	14.00	14.00	Jul, 80
Philippines	6.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	May 19, 78
Singapore	3.50	4.50	6.75	8.50	8.50	8.75	10.50	10.50	Dec 1, 80
South Africa	9.00	8.50	7.00	7.00	7.00	7.00	7.00	7.00	Aug 13, 79
Venezuela	7.00	7.50	11.00	12.00	10.00	10.00	13.00	13.00	Nov 14, 80

[a]: applicable to large banks; 13% for other banks

Day-to-day money rates

monthly averages

	1977	1978	1979	1980							
	Dec	Dec	Dec	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
United States	6.56	10.03	13.78	10.98	9.47	9.03	9.61	10.87	12.81	15.32	18.95
Canada	6.84	9.44	13.83	13.68	11.37	10.20	9.86	9.82	10.70	11.05	15.61
Japan	5.01	4.57	8.02	12.56	12.62	12.68	12.11	11.40	11.00	9.61	9.49
Australia	9.96	8.40	7.84	10.74	10.34	10.91	9.63	9.81	8.96	9.84	9.51
United Kingdom	4.81	10.00	14.87	15.90	14.06	15.06	14.87	14.90	15.00	12.25	13.00
Belgium	7.48	6.73	10.65	13.78	12.43	11.87	10.01	9.64	9.60	10.16	9.68
France	9.30	6.67	12.17	12.61	12.43	12.04	11.32	11.37	11.22	10.74	10.87
Germany	3.24	3.61	9.15	9.80	10.04	9.81	8.95	9.28	8.98	8.82	9.13
Italy	11.37	11.00	16.00	16.75	16.87	16.87	16.87	16.87	17.87	17.62	17.50
Netherlands	5.27	10.00	15.67	10.80	11.01	10.34	10.11	9.75	9.30	9.00	8.37
Austria	9.25	5.37	8.50	10.50	10.50	10.75	10.25	11.00	11.00	11.50	11.50
Finland	22.99	9.29	13.53	12.49	12.50	12.50	12.50	12.50	12.50	12.50	12.50
Ireland	8.00	12.12	16.88	17.38	17.38	16.81	13.75	13.62	13.25	13.38	13.31
Spain	7.22	16.75	9.61	17.81	14.22	12.71	12.57	13.16	14.38	15.24	16.74
Sweden	8.91	6.26	11.99	12.07	12.74	11.75	12.90	11.95	13.00	11.80	11.41
Switzerland	0.85	0.00	1.25	4.00	3.75	2.50	6.50	2.00	0.87	3.37	5.75
Argentina	n.a.	n.a.	78.22	58.14	64.92	83.39	52.89	51.36	54.58	58.04	70.84
Brazil	28.44	35.64	32.28	20.52	25.56	30.84	31.80	35.76	38.28	40.56	49.68
Hong Kong	4.87	9.67	14.19	12.37	8.00	7.25	8.75	8.31	10.87	13.87	14.05
Korea	14.40	15.00	15.00	19.20	19.20	19.20	19.20	17.22	17.22	14.82	14.82
Philippines	14.44	13.22	16.25	13.24	11.33	10.44	6.47	9.71	9.26	13.10	15.70
Singapore	3.59	4.98	10.17	11.19	9.42	9.15	8.97	10.75	14.53	11.06	10.23
South Africa	7.65	7.11	3.81	4.23	4.37	4.26	4.15	4.35	4.47	4.99	5.60
Euro-dollars	6.94	10.80	14.41	9.95	9.58	9.13	9.86	10.96	13.18	16.15	19.22

Treasury bill rates

bond-equivalent yields, at or near end of month

	1977	*1978*	*1979*	*1980*							
	Dec	*Dec*	*Dec*	*May*	*Jun*	*Jul*	*Aug*	*Sep*	*Oct*	*Nov*	*Dec*
United States	6.33	9.42	12.39	8.05	7.90	9.12	10.70	11.09	13.07	14.84	14.87
Canada	7.17	10.46	13.66	11.58	10.24	10.06	10.49	10.95	11.91	13.70	17.01
Japan	4.15	3.39	5.68	6.82	6.82	6.82	6.82	6.44	6.44	5.93	5.93
Australia	8.35	8.35	9.31	10.83	10.79	10.64	10.53	10.56	10.95	11.47	12.17
United Kingdom	6.42	12.01	16.45	16.75	16.29	14.69	15.00	14.37	14.44	13.38	13.45
Belgium	9.25	9.25	14.40	15.50	13.75	12.75	12.35	12.35	12.10	12.75	12.75
Ireland	6.74	11.83	16.37	16.69	16.57	16.46	13.47	13.43	12.72	12.78	12.84
Italy	12.81	12.81	15.62	15.75	16.12	16.25	16.12	16.00	16.87	16.88	16.98
Netherlands	6.00	9.50	12.75	10.87	10.37	9.87	10.25	9.25	8.85	8.75	8.00
Sweden	9.21	5.84	9.74	12.89	12.89	12.84	12.84	12.90	12.90	12.90	12.87
Argentina	109.06	82.55	71.04	64.01	70.26	70.43	48.60	51.03	58.31	60.73	66.19
Brazil	38.08	41.21	27.84	24.62	33.84	39.14	42.66	43.70	50.18	66.34	76.84
Korea	16.88	17.01	19.53	22.01	22.01	22.01	22.01	19.50	19.50	16.35	16.35
Mexico	n.a.	12.75	17.89	22.34	21.55	20.91	21.36	23.42	24.73	n.a.	n.a.
New Zealand	7.50	10.50	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25
Philippines	10.04	12.08	12.63	12.31	12.46	12.54	12.66	12.67	12.70	12.75	12.74
Singapore	3.17	4.01	6.18	7.10	6.85	6.79	6.89	6.99	6.98	6.86	6.77
South Africa	8.17	7.61	4.30	4.78	4.72	4.47	4.64	4.84	5.13	5.71	6.31

Representative money-market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money-market instruments, other than Treasury bills, at or near end of month

	1977	*1978*	*1979*	*1980*							
	Dec	*Dec*	*Dec*	*May*	*Jun*	*Jul*	*Aug*	*Sep*	*Oct*	*Nov*	*Dec*
United States	6.84	10.57	13.70	7.90	8.03	8.82	10.91	12.24	14.24	17.15	17.62
Canada	7.25	10.62	14.15	11.75	11.50	10.60	10.75	11.10	12.50	14.10	17.50
Japan	5.89	4.64	8.01	12.53	10.87	11.54	10.95	11.48	9.57	9.80	9.80
Australia	9.75	9.10	10.30	13.50	13.00	12.50	12.40	12.00	11.70	11.75	13.00
United Kingdom	6.50	12.50	17.00	17.00	17.00	14.87	16.69	15.87	16.62	14.50	14.75
Belgium	9.50	9.25	14.45	15.75	14.00	13.00	12.60	12.60	12.45	13.00	13.10
France	9.19	6.44	12.62	12.37	12.25	11.44	11.62	12.31	11.31	11.44	11.56
Germany	3.60	3.70	8.70	10.20	9.95	9.30	8.90	9.10	9.20	9.45	10.20
Ireland	6.75	13.00	18.12	17.88	17.50	16.75	14.50	13.75	13.37	13.75	13.62
Italy	11.75	11.37	17.12	17.12	17.25	17.25	17.25	18.75	17.75	17.37	17.37
Netherlands	6.25	10.50	13.00	11.25	10.62	9.37	10.75	10.37	9.25	10.00	9.37
Spain	12.06	22.80	13.20	18.70	16.90	15.00	14.60	14.40	15.30	16.00	17.40
Switzerland	2.02	0.50	6.12	5.62	5.87	5.25	6.12	5.87	5.62	6.12	7.50
Hong Kong	5.73	11.82	14.37	12.12	8.75	7.94	9.25	10.44	12.56	15.87	17.09
Korea	16.88	17.01	19.53	22.01	22.01	22.01	22.01	19.27	19.27	16.35	16.35
New Zealand	11.87	12.00	16.00	14.25	13.50	13.25	13.40	14.00	14.25	14.10	14.25
Philippines	11.96	11.48	10.41	11.06	12.22	9.96	10.92	10.97	11.96	13.15	15.01
Singapore	4.81	7.38	10.12	10.75	9.75	9.50	9.50	11.62	13.62	14.12	14.12
South Africa	9.00	7.85	4.72	5.34	5.24	4.93	4.93	5.00	5.05	6.07	7.12

Commercial bank deposit rates

at or near end of month

	1977	1978	1979	1980							
	Dec	Dec	Dec	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
United States	6.80	10.90	13.55	8.70	8.90	8.90	11.55	12.25	14.25	17.07	16.25
Canada	7.25	10.45	14.05	11.50	11.00	10.50	10.75	10.65	12.40	13.95	17.00
Japan	3.25	2.50	8.37	13.20	11.00	11.50	11.00	11.30	9.50	9.90	9.00
Australia	9.50	8.50	10.25	13.15	13.33	12.41	12.03	11.33	10.95	11.21	12.71
United Kingdom	6.37	12.25	16.81	17.00	16.88	15.87	16.75	15.94	16.75	14.44	14.87
Belgium	9.50	9.87	14.50	15.75	14.00	12.50	12.63	12.50	12.13	13.00	12.63
France	9.00	6.50	12.50	12.25	11.75	11.25	11.62	11.75	11.00	11.50	11.25
Germany	3.40	3.50	7.75	9.25	9.00	8.60	8.40	8.40	8.40	8.75	8.00
Italy	17.00	12.50	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25
Netherlands	7.00	11.62	13.50	11.50	10.75	9.50	10.62	10.25	9.75	10.25	9.50
Austria	9.00	6.75	8.50	10.00	10.37	10.75	11.37	11.62	11.50	11.50	11.25
Denmark	8.00	7.00	10.00	12.00	12.00	12.00	12.00	11.00	10.00	10.00	10.00
Finland	4.25	3.25	4.25	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Ireland	6.87	12.75	17.87	17.62	17.37	16.25	14.00	13.87	13.25	13.75	13.62
Norway	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Spain	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Sweden	7.75	6.25	8.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75
Switzerland	1.12	0.12	4.75	4.75	5.25	4.75	5.00	5.25	5.62	6.12	7.50
Argentina	n.a.	86.63	72.64	59.01	68.62	70.57	53.05	50.61	59.00	62.00	72.00
Brazil	39.60	46.80	45.00	43.68	43.80	45.24	47.40	49.56	54.48	61.20	69.48
Hong Kong	1.75	4.50	9.25	9.00	6.50	6.00	6.00	6.00	9.00	13.00	13.00
Korea	13.20	15.00	15.00	19.20	19.20	19.20	19.20	17.22	17.22	14.82	14.82
Mexico	11.00	12.00	16.75	21.11	19.13	18.20	18.98	20.74	21.74	n.a.	n.a.
New Zealand	11.00	12.00	15.90	13.75	13.25	13.25	13.30	13.05	13.50	13.50	13.50
Philippines	8.50	8.50	10.50	10.50	10.50	10.50	14.00	14.00	14.00	14.00	14.00
Singapore	5.31	7.31	10.31	10.19	9.06	8.69	9.38	11.44	13.00	13.50	13.19
South Africa	8.70	7.30	4.82	5.22	5.15	4.75	4.77	4.90	5.10	6.62	7.87
Venezuela	7.00	7.25	15.00	13.00	12.00	12.00	12.00	12.00	12.00	12.00	16.00

Commercial bank lending rates to prime borrowers

at or near end of month

	1977	1978	1979	1980							
	Dec	Dec	Dec	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
United States	7.75	11.75	15.25	14.00	11.50	11.00	11.50	13.00	14.50	17.75	21.50
Canada	8.25	11.50	15.00	13.75	13.25	12.50	12.50	12.25	12.75	14.50	18.25
Japan	5.47	4.50	6.51	9.02	9.27	9.34	9.27	8.99	8.82	8.85	8.55
Australia	11.50	11.00	10.75	12.50	12.50	12.50	12.50	12.50	12.50	12.50	13.50
United Kingdom	8.00	13.50	18.00	18.50	17.50	17.50	17.50	17.50	17.50	15.00	15.00
Belgium	10.00	10.00	15.25	18.75	17.25	17.00	15.75	15.75	15.75	15.75	15.75
France	11.35	10.95	13.65	14.15	14.15	13.90	13.40	13.40	13.40	13.40	13.40
Germany	6.00	5.50	9.75	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50
Italy	16.00	15.00	19.50	19.50	19.50	19.50	19.50	19.50	19.50	21.00	20.50
Netherlands	7.00	12.00	15.00	12.75	12.00	11.25	11.75	11.25	10.25	10.75	10.75
Austria	9.75	8.75	8.50	11.00	11.00	11.00	11.00	12.00	12.00	12.25	12.50
Denmark	12.50	10.00	13.75	15.75	15.75	15.75	15.75	14.75	13.75	13.75	13.75
Finland	8.85	7.87	9.06	9.84	9.86	9.84	9.83	9.84	9.83	n.a.	n.a.
Ireland	8.25	13.75	16.00	18.50	18.50	17.50	15.50	15.50	14.50	14.50	14.50
Norway	8.33	11.00	11.00	11.00	11.00	11.00	11.00	12.50	12.50	12.50	12.50
Spain	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00
Sweden	10.25	8.50	10.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75
Switzerland	5.75	5.00	5.00	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75
Argentina	152.08	86.75	80.00	70.50	75.50	74.50	58.50	53.00	60.00	66.00	77.00
Brazil	52.05	61.70	57.00	57.00	57.00	57.00	57.00	57.00	57.00	88.00	88.00
Hong Kong	4.75	8.75	14.50	14.50	12.00	10.00	10.00	10.50	13.00	17.00	17.00
Korea	15.00	18.50	18.50	24.50	23.50	23.50	23.50	21.50	21.50	19.50	19.50
Mexico	17.00	17.50	19.00	22.39	22.47	22.53	22.82	23.51	24.42	24.77	26.25
New Zealand	8.50	9.75	11.75	12.75	12.75	12.75	12.75	13.00	13.00	13.00	13.00
Philippines	14.00	14.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
Singapore	7.02	7.65	9.50	11.98	11.40	11.10	10.95	11.30	12.60	13.55	13.60
South Africa	12.50	11.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50
Venezuela	9.50	10.25	13.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	15.00

Domestic government bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980							
	Dec	Dec	Dec	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
United States	7.97	9.00	10.20	10.24	9.90	10.70	11.46	11.90	12.33	12.25	11.46
Canada	8.77	9.68	11.32	11.39	11.29	12.32	12.42	12.98	13.22	13.01	12.69
Japan	6.40	6.40	8.63	8.75	8.45	8.63	8.77	8.92	8.84	9.26	9.04
Australia	9.50	8.90	10.45	11.85	11.80	11.80	11.85	12.00	12.40	12.60	13.00
United Kingdom	10.53	12.75	13.83	13.30	13.06	12.52	13.27	12.69	12.52	12.65	13.05
Belgium	8.76	8.80	11.13	12.26	11.84	11.77	12.08	12.43	12.46	12.61	13.04
France	11.07	9.94	12.59	13.49	13.34	13.43	13.46	13.85	14.27	14.24	14.31
Germany	5.52	6.65	7.91	8.20	8.00	7.78	7.95	8.24	8.55	8.59	9.19
Italy	10.82	10.89	11.28	11.64	11.80	12.06	12.00	12.12	12.53	12.42	12.12
Netherlands	8.11	8.48	9.29	9.97	9.95	9.66	10.08	10.25	10.20	10.46	10.48
Austria	9.00	7.91	8.20	9.26	9.04	9.21	9.62	9.61	9.90	n.a.	n.a.
Denmark	16.83	17.27	18.28	20.27	20.90	19.95	20.71	20.29	19.24	19.40	19.62
Finland	10.25	9.19	9.58	10.46	10.44	10.49	10.52	10.35	10.48	10.43	n.a.
Ireland	11.30	13.44	16.64	16.19	15.78	14.64	14.49	14.57	14.77	14.91	15.63
Norway	8.37	8.19	10.04	10.31	10.16	10.21	10.73	n.a.	10.40	10.44	10.44
Sweden	9.84	10.09	11.22	11.31	11.38	11.38	11.46	12.63	12.68	12.71	12.61
Switzerland	3.75	3.03	4.20	4.82	4.72	4.59	4.87	4.85	4.69	4.67	4.63
Argentina	181.65	112.18	47.94	47.21	57.33	81.94	42.24	40.46	38.21	101.38	36.84
New Zealand	10.00	10.02	12.98	13.44	13.49	13.40	13.25	12.98	12.96	n.a.	n.a.
Philippines	13.40	13.40	13.20	13.40	13.40	13.40	13.40	13.40	13.40	13.40	13.40
South Africa	10.75	9.85	9.44	9.69	9.85	10.00	10.05	10.62	11.10	11.75	11.80
Venezuela	7.24	7.24	7.29	7.45	7.45	7.45	7.37	7.40	7.40	7.43	7.39

Domestic corporate bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980							
	Dec	Dec	Dec	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
United States	8.30	9.25	10.75	11.20	10.63	11.65	12.50	12.88	13.38	13.38	13.00
Canada	9.71	10.34	12.07	12.29	12.14	13.19	13.35	13.74	13.95	13.72	13.62
Japan	6.68	6.94	8.34	8.68	8.23	8.20	8.24	8.44	8.48	8.60	8.60
Australia	11.00	10.25	11.65	13.25	13.15	13.15	13.25	13.35	13.75	14.00	14.25
United Kingdom	11.88	13.53	14.96	14.39	13.98	13.33	13.90	13.78	13.61	13.63	14.21
Belgium	9.85	9.58	11.93	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
France	12.09	10.27	12.92	14.39	14.16	13.93	13.86	14.03	14.69	14.83	15.23
Germany	5.92	6.80	8.20	9.40	8.90	8.40	8.10	8.40	8.80	9.30	9.50
Italy	10.71	10.12	10.22	12.14	14.12	14.19	13.73	13.31	12.64	12.65	12.99
Netherlands	7.90	8.62	9.95	10.43	9.96	9.83	10.33	10.49	10.48	10.33	10.71
Norway	8.59	8.37	10.53	10.91	10.46	10.65	10.70	n.a.	10.55	11.24	11.24
Spain	11.58	12.17	11.77	10.89	10.83	10.90	n.a.	n.a.	n.a.	n.a.	n.a.
Sweden	9.83	10.03	10.21	11.07	11.71	11.80	11.90	11.94	11.99	12.10	11.95
Switzerland	4.96	4.85	5.53	5.56	5.64	5.58	5.76	5.83	5.71	5.78	5.63
Korea	19.60	24.00	32.50	31.00	30.50	29.00	28.70	26.00	26.00	23.50	26.30
Mexico	17.56	20.37	21.99	24.70	23.75	24.99	26.26	26.13	26.12	27.55	28.03
Venezuela	10.39	12.43	14.55	14.40	12.81	12.82	12.41	12.40	13.55	14.78	16.15

Key to data in tables

I. International markets

Definitions

An *international bond* issue is one sold outside the country of the borrower. It may be either a Euro-bond issue or a foreign bond issue.

A *Euro-bond* issue is one underwritten by an international syndicate and sold principally in countries other than the country of the currency in which the issue is denominated.

A *foreign bond* issue is one underwritten by a syndicate composed of members from one country, sold principally in that country, and denominated in the currency of that country.

A *Euro-currency bank credit* is a loan in a currency which is not native to the country in which the bank office making the loan is located.

Data on *new international bond issue volume* include all publicly announced issues with an original maturity of three years or more, whether publicly or privately placed, but exclude those where the investor is a central bank, monetary authority, or government.

Data on *new Euro-currency bank credit volume* include all publicly announced loans with an original maturity of more than one year. A loan is included in the period in which the lending banks make a commitment covering the amount and terms of the loan to the borrower.

Categories of borrower

U.S. companies include both parent companies and their financing affiliates, either domestic or foreign.

Other companies include private companies domiciled outside the United States and their affiliates.

State enterprises include public agencies.

Governments include central and local governments.

Country of borrower

The country of the borrower is the residence of the borrowing entity, except where the entity is a financing vehicle, in which case the residence of the parent company and or guarantor is used.

International bond yields

Yields are calculated to the nearest day of maturity. Interest on bonds with annual coupons is discounted semiannually for comparability in computation of yield.

The yield indices are simple arithmetic averages of end-of-month secondary market yields for groups of selected straight-debt securities. Yield indices for six categories of bonds have been calculated according to borrower and currency. They are based on issues of good-quality, well-known borrowers. Occasionally the individual issues in each category are changed.

The number of issues represented in each of the indices is as follows:

Long-Term, U.S. companies, U.S. dollar — —ten Euro-bond issues.

Long-term, U.S. companies, Swiss franc — four foreign bond issues.

Long-term, European companies, U.S. dollar — ten Euro-bond issues.

Long-term, European companies, German mark — ten Euro-bond issues.

Long-term, governments, U.S. dollar — six Euro-bond issues (governments of Italy, Denmark, and France).

Euro-currency deposit rates

All data are prime banks' bid rates for deposits in London. Offer rates commonly used as a basis for Euro-dollar lending are generally .125% above bid rates.

II. Domestic markets

Day-to-day money rates

Argentina — 7-day interbank money.

Austria — day-to-day interbank rate.

Australia — approximate effective interest rate in the authorized short-term money market.

Belgium — Interbank call money.

Brazil — overnight financing of Treasury bills (LTN). From December 1979, rates paid for federal funds.

Canada — chartered banks' day-to-day loans.

Finland — Bank of Finland call money.

France — interbank call money against private paper.

Germany — interbank call money.

Hong Kong — interbank 24-hour call rate.

Ireland — interbank call money.

Italy — interbank 48 hour call money.

Japan — Tokyo interbank call money, overnight lenders rate until December 1974. New series as of January 1975, unconditional lenders rate.

Korea — call money.

Netherlands — open-market call money.

Philippines — interbank call money.

Singapore — interbank overnight money.

South Africa — National Finance Corporation call money.

Spain — day-to-day interbank rate.

Sweden — interbank call money.

Switzerland — call money.

United Kingdom — call money.

United States — effective Federal funds rate.

Euro-dollars — prime banks' bid rate for overnight money.

Treasury bill rates

Argentina — 28-day Treasury bills.

Australia — new issues of 13-week Treasury notes.

Belgium — 3-month Treasury certificates.

Brazil — 91-day Treasury bills (LTN).

Canada — 3-month Treasury bills at tender.

Ireland — 3-month Central Bank Exchequer bills.

Italy — 6-month Treasury bills.

Japan — 60- to 62-day noninterest-bearing discount government bills.

Korea — 3-month Treasury bills sold by Korean Central Bank.

Mexico — 3-month Federal Treasury bills.

Netherlands — 3-month Treasury bills.

New Zealand — 3-month Treasury bills.

Philippines — 91-day Treasury bills at tender.

Singapore — 91-day Treasury bills at tender.

South Africa — 3-month Treasury bills at tender.

Sweden — new issues of 3-month Treasury bills.

United Kingdom — 91-day Treasury bills at tender.

United States — 3-month Treasury bills.

Representative money-market rates

Australia — 3-month prime finance company paper.

Belgium — 4-month Fonds des Rentes certificates.

Canada — 3-month prime finance company paper.

France — 3-month interbank money against private paper.

Germany — 3-month interbank deposits.

Hong Kong — 3-month interbank deposits.

Ireland — 3-month interbank deposits.

Italy — 3-month interbank deposits.

Japan — Tokyo interbank call money, unconditional, lender's rate until December 1974. New series as of January 1975, 3-month repurchase agreements.

Korea — 3-month financial bill.

Netherlands — 3-month municipal loans until December 1976. New series as of January 1977, 3-month interbank deposits.

New Zealand — 90-day commercial bills.

Philippines — 90-day promissory notes.

Singapore — 3-month bank acceptances.

South Africa — 90-day bank acceptances.

Spain — 1- to 2-month interbank deposits.

Switzerland — 3-month interbank deposits.

United Kingdom — 3-month interbank deposits.

United States — 3-month prime industrial paper.

Commercial bank deposit rates

Argentina — nominal 30-day time deposits. Average of bank rates published by the Central Bank.

Austria — 3-month time deposits.

Australia — 3-month certificates of deposit.

Belgium — special maximum rate for 3-month time deposits in large amounts.

Brazil — 6-month negotiable certificates of deposit of investment banks net of taxes.

Canada — 3-month time deposits.

Denmark — time deposits of 3-months' notice.

Finland — time deposits of six-month notice.

France — 3-month time deposits of FF. 1,000,000.

Germany — 3-month time deposits in large amounts.

Hong Kong — 3-month certificates of deposit. Rate set by the Hong Kong Exchange Banks' Association.

Ireland — 3-month time deposits.

Italy — 3-month time deposits of Lit. 100 million or more.

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Key to data in tables – continued

Japan — 3-month time deposits until April 1979, 90-day yen-denominated certificates of deposit issued by the Tokyo office of Morgan Guaranty Trust Company.

Korea — 3-month time deposits.

Mexico — 3-month certificates of deposit issued by financieras to corporations for amounts over Ps. 1 million. Higher rates available to individuals.

Netherlands — 3-month time deposits in large amounts.

New Zealand — 6-month transferable certificates of deposit.

Norway — 3-month time deposits. Higher rates may be negotiated for 12-month or more time deposits in large amounts.

Philippines — 3-month time deposits.

Singapore — 3-month time deposits until May 1975, 3-month certificates of deposit thereafter.

South Africa — 3-month time deposits at merchant bank until May 1975. Negotiable certificates of deposit from June 1975.

Spain — maximum legal rate for 3-month deposits.

Sweden — deposits at 6-months' notice.

Switzerland — 3-month time deposits.

United Kingdom — 3-month time deposits.

United States — 3-month negotiable certificates of deposit issued by Morgan Guaranty Trust Company.

Venezuela — 6-month negotiable certificates of deposits for large amounts until December 1978. New series as of January 1979, similar rate for domestic depositors only.

Commercial bank lending rates to prime borrowers

Argentina — average rate on 30-day loans.

Austria — overdraft rate for prime borrowers, including commission.

Australia — approximate overdraft rate for prime borrowers.

Belgium — prime overdraft rate.

Brazil — commercial bank legal maximum rate (discount basis) for maturities up to 60 days until August 1977. In addition, compensating balances were required. New series as of September 1977, weighted average investment bank lending rates.

Canada — prime rate.

Denmark — approximate rate for loans and advances to prime borrowers.

Finland — average rates on total commercial bank lending.

France — overdraft rate for prime borrowers, including a commission of .05% per month on highest debit balance during the month.

Germany — approximate effective overdraft rate for prime borrowers.

Hong Kong — prime rate.

Ireland — AA corporate borrowing rate.

Italy — unsecured overdraft rate for prime borrowers.

Japan — average rate on loans and discounts of city banks, computed by the Bank of Japan until December 1974. New series as of January 1975, average contracted interest rate for short-term loans of city banks. In addition, compensating balances may be required.

Korea — prime rate.

Mexico — major bank prime rate, subject to legal maximum. In addition, compensating balances are required.

Netherlands — overdraft rate for prime borrowers, including commission.

New Zealand — overdraft rate for prime borrowers.

Norway — overdraft rate, including a commission of .333% prior to July 1978, .25% thereafter, per quarter on the total line of credit.

Philippines — maximum legal rate, for unsecured loans exclusive of service fee.

Singapore — most common overdraft rate, major banks.

South Africa — unsecured overdraft rate for prime borrowers.

Spain — maximum legal rate for discounting commercial bills plus a commission of 1% per annum. In addition, compensating balances may be required.

Sweden — actual interest rate on 3-month loans to prime industrial borrowers.

Switzerland — unsecured overdraft rate for prime borrowers, excluding commission of .25% per quarter on average or highest outstanding debit balance in quarter.

United Kingdom — unsecured overdraft rate for prime borrowers.

United States — prime rate of Morgan Guaranty Trust Company. In addition, compensating balances are required.

Venezuela — representative rate for prime borrowers until December 1978. New series as of January 1979, similar rate for domestic prime borrowers only.

Domestic government bond yields

Argentina — 7% National Adjustable Bond, third series maturing in 1985, inflation adjusted by the Official Correction Index.

Austria — Austrian National Bank average yield on all outstanding government bonds.

Australia — 20-year government bonds.

Belgium — Belgian National Bank average yield on government bonds maturing in more than five years.

Canada — Bank of Canada average yield on all direct government bonds due or callable in 10 years or more.

Denmark — 5% government bond of 2007 until December 1976. New series as of January 1977, 10% government bonds with maturity of 7 to 8 years.

Finland — rate of interest at issue on central government bonds intended for public subscription, weighted by sales of bonds in the latter half of each month.

France — Institut National de la Statistique et des Etudes Economiques (INSEE) yield on public and semi-public sector bonds.

Germany — Frankfurter Allgemeine Zeitung (FAZ) 7% public authority bond average until September 1978. New series as of October 1978, FAZ 10-year public authority bond average.

Ireland — 15-year government bonds.

Italy — average of yields on six outstanding bonds of public-sector entities, new series as of January 1977.

Japan — average yield on outstanding maturities of 6.5% national government bonds until December 1974. New series as of January 1975, secondary market yield for the 6.1% due 1988 national government bond.

Netherlands — Central Bureau of Statistics (CBS) average yield on three latest 7% to 7.75% government bonds.

New Zealand — average yield on government bonds maturing after 10 years.

Norway — 5% government bond of 1996.

Philippines — Central Bank 5-year Certificate of Indebtedness, regular issue.

South Africa — 25-year government bonds.

Sweden — 15-year government bonds.

Switzerland — Swiss Confederation bond average.

United Kingdom — F.T. (Financial Times) Actuaries 20-year government stock until December 1975. New series as of January 1976, F.T. Actuaries 25-year government stock.

United States — Morgan Guaranty 20-year U.S. Government Bond Index.

Venezuela — Banco Central average yield on public-sector bond issues.

Domestic corporate bond yields

Australia — long-term secured debentures, indicated by Australian United Corporation.

Belgium — Belgian National Bank average yield on private corporate bonds maturing in more than five years.

Canada — McLeod, Young, Weir Co. Ltd., average yield on ten industrial bonds.

France — INSEE tax-adjusted average yield on outstanding private corporate bonds.

Germany — FAZ 6% industrial bond average until September 1978 New series as of October 1978, Bundesbank average yield on industrial bonds

Italy — average of yields of four outstanding bonds of leading Italian industrial companies; new series as of January 1977.

Japan — average of yields on outstanding Nippon Telegraph & Telephone interest-bearing yen debentures until December 1974. New series as of January 1975, secondary market yield for NTT bond maturing April 1987.

Korea — average of yields on 3-year corporate bonds guaranteed by local banks.

Mexico — 9% Teléfonos de Mexico bond, series AA, of 1990 until December 1976. Average of yields of six outstanding Telefonos de Mexico bonds from January 1977.

Netherlands — CBS average yield on three 6% to 6.5% corporate bonds.

Norway — 5.75% Dalen Portland-Cement bond of 1969-1984.

Spain — average yield for a selected group of electricity companies.

Sweden — Central Satistical Bureau average yield on industrial bonds.

Switzerland — average yield on outstanding bonds of four leading Swiss companies.

United Kingdom — F.T. (Financial Times) Actuaries 20-year debentures and loans.

United States — Salomon Brothers index of new issue yields for Aa industrial bonds with five-year call protection.

Venezuela — average of yields on 15-year bond issues of Electricidad de Caracas.

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World Financial Markets

Morgan Guaranty Trust Company of New York

February 1981

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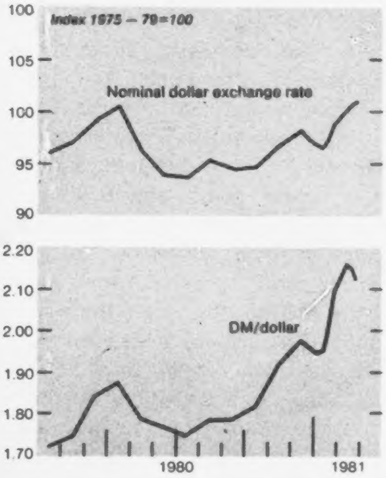

Foreign exchange market developments

Following several weeks of exceptional strength, the dollar has receded from its mid-February high point. At its peak, on February 13, the dollar had risen about 4% on an effective basis for the year to date, but since then it has dropped 1%. Even at its current level, the dollar is well above its postwar lows of October 1978, and it also has reversed about one-third of the February 1973 devaluation. At present, the dollar is only about 5½% below its December 1971 Smithsonian level, whereas in October 1978 it was down nearly 12% (see Table 1).

The dollar's net advance in early 1981 has been heavily at the expense of the German mark and other EMS currencies (Table 2). From the end of December 1980 until February 24, 1981 the dollar rose 7½% against the mark, 9½% against the French franc, and 8½% *vis-à-vis* the lira. During the same period the dollar rose 7% against the British pound and 2% in terms of the Japanese yen.

The partial recovery of the mark after mid-February, from DM 2.26 to DM 2.10, was due largely to interest rate movements. German interest rates have risen substantially. For example, three-month interbank rates moved up by more than 2½%, to about 12%, and one-month Euro mark rates from 9% to 14%. The recent interest rate increases were the consequence of a distinct tightening of monetary policy by the German central bank. On February 19 the Bundesbank made a major change in its operating procedures by terminating commercial banks' unlimited access to fixed-rate Lombard credit at 9% and replacing it with a "special" Lombard facility with variable, day-by-day determination of amounts and rates. This pushed up interest rates by immediately removing DM13 billion of liquidity from the market and introducing considerable uncertainty about the future availability and cost of central bank credit. The new facility gives the Bundesbank much more flexibility in influencing market interest rates because it can change the terms of usage quickly without reference to the central bank council, which meets about every three weeks. Although this move has significant long-term implications for the conduct of German monetary policy, its near-term impact is to raise interest rates sharply and to stabilize the mark. The economy is weak, with real GNP projected to decline in first-half 1981 from second-half 1980, and consumer price

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Table 1

Decline and recovery of the dollar

nominal effective dollar rate,
December 18, 1971=100

May 29, 1970	108.6
December 18, 1971	100.0
March, 1973	91.6
October, 1978	87.3
December 31, 1980	90.6
February 24, 1981	93.9

Table 2

Exchange rate changes from December 31, 1980 to February 24, 1981

in percent vis-à-vis U.S. dollar and on
a trade-weighted average basis

	vis-à-vis U.S. dollar	trade-weighted average basis
U.S. dollar	—	3.6
Canadian dollar	—0.4	0.5
Japanese yen	—2.2	0.5
Belgian franc	—9.2	—2.2
Dutch guilder	—9.1	—2.3
French franc	—8.7	—2.2
German mark	—6.8	0.2
Italian lira	—7.9	—1.4
Swiss franc	—7.3	—1.0
British pound	—6.6	—0.9

Table 3

Selected U.S. interest rates

in percent per annum

	Recent peak rates (weekly averages)	Feb. 24 1981
Federal funds	20.06	15.00
3-month Treasury bills	16.76	14.18
3-month CDs	20.23	15.38
Prime rate	21.50	19.00
Commercial paper	18.68	14.50
3-month Euro-dollar	21.27	16.50

inflation is running at about a 6% annual rate.

While German interest rates rose sharply, the pace of decline in U.S. money market rates accelerated. The Federal funds rate declined by more than five percentage points during the past four weeks to around 15% on February 24 after hitting a historic peak (on a weekly average basis) of 20.1% in the first week of 1981 (see Table 3). The decline in U.S. short-term rates represents both a downward correction of rates which had risen to very high levels in real terms as a consequence of Federal Reserve actions to meet the monetary aggregate targets for 1980; and a modest easing of credit markets permitted by the subsequent success in containing the growth of monetary aggregates within the target growth range. For example, in contrast to the explosive 16% annual growth rate recorded during the six months preceding November 1980, the subsequent growth in M-1B, at around a 1% annual rate through early February, was very restrained. As a consequence, the favorable interest rate differential between dollar- and mark-denominated assets narrowed dramatically, to 2% in the case of one-month Euro-deposits on February 24, in stark contrast to a 10% differential in mid-December. The mark may have been aided further by the Bundesbank's decision to permit non-residents to purchase domestic fixed-interest securities with maturities of less than one year.

Official exchange market intervention to smooth the mark's decline against both the dollar and other EMS currencies has exceeded $5 billion since the beginning of 1981, and part of this was undertaken by the Federal Reserve. In this regard it is interesting to note that thus far there has been no shift in U.S. intervention policy under the Reagan Administration. In any case, this intervention was not a major factor in the mark's recent rise.

After its recent partial recovery against the dollar and EMS currencies, the mark still had undergone a real effective depreciation of 7% from a year ago, while the dollar had risen by 6½%. In the light of current account developments, changes of this magnitude are not unrealistic. The movement of the German current account balance to a $15 billion deficit and the U.S. balance to a $4 billion surplus in 1980 were only partly the consequence of cyclical factors. Rather, as discussed in the October 1980 issue of this publication, the German current account deficit was the result of a rather general deterioration in the manufactures sector in addition to the increased cost of energy imports and the continuing climb in net invisibles payments. The U.S. surplus, meanwhile, stemmed from broad-based strength in agriculture, manufactures, and invisibles. Furthermore, private long-term capital flows have been far more favorable to the United States than to Germany.

In recent months, German officials increasingly have acknowledged the existence of a competitive problem. For example, the current issue of the Bundesbank monthly bulletin observes that "The depreciation of the Deutsche Mark up to now, regrettable though it has been for domestic prices, has helped to strengthen Germany's competitive position in price terms . . .". Of course, an improvement in Germany's price competitive position could come either from a change in the effective exchange rate or from continued superior price performance. However, the latter has become somewhat more difficult to achieve because in the past German domestic inflation was held down by a strengthening mark. In contrast, Germany's import prices are expected to rise in coming months because of the mark's recent depreciation.

Shifts in U.S. economic policies have played a major role in the dollar's improved performance. In the field of energy, a much more realistic pricing policy has led to major achievements in fuel conservation. The schedule introduced by President Carter to deregulate the price of domestic crude oil has been accelerated by the Reagan Administration, which also is considering action to speed up deregulation of natural gas prices. The fact that economic incentives to conserve and to produce energy have been increased is very important in light of the United States' relative abundance of energy resources and the scope for additional fuel conservation, particularly motor fuel. Last year, U.S. oil consumption dropped by more than 8%, which was roughly the same as the decline in other industrial countries. But since 60% of total U.S. oil needs are met from domestic production, the drop in net U.S. oil imports was more than 20% (from 8.3 million bpd to 6.5 million bpd), nearly double the rate of decline abroad. The fall in U.S. oil consumption is strongly related to the increase in prices at the consumer level. In January of this year the weighted-average price of petroleum products in the United States was 147% above that of 1978, or double in real terms, and the increase was well above the average in most other industrial countries.

The dollar has also been supported by a fundamental restructuring of U.S. monetary policy over the last two years, which has led to the establishment of positive real interest rates in the United States. This situation has been largely the result of the change in Federal Reserve operating procedures used to control money supply growth that was implemented in the autumn of 1979 and the adoption of a more restrictive policy stance under Federal Reserve Board Chairman Volcker. The new administration recently reinforced the Federal Reserve's commitment to a steady reduction in U.S. money supply expansion in the years ahead by assuring the Fed of its full support in pursuing this objective. Even with the recent easing of U.S. money-market rates, they have remained positive in real terms, and domestic economic and financial forces should keep any interest rate declines in the months ahead moderate .

In the area of fiscal policy, a significant shift in orientation is now underway. The Reagan Administration is seeking to reverse past trends by reducing the role of government and shifting resources from consumption to productive investment. Growth in federal spending in fiscal 1982 is to be held to near 6%, compared with a rise of about 12% proposed by the previous administration. This could involve a spending reduction in real terms of 3% to 5%, depending on inflation. The cuts in spending proposed thus far amount to about $45 billion. Of this amount about $42 billion would come from non-defense categories, leaving the outlay some 8% below the level previously expected for next year. However, these proposed cuts will not lead to a substantially lower budget deficit next year, since the administration is also seeking to cut personal and business taxes by an even larger amount, about $54 billion in fiscal 1982. The budget deficit is projected to reach $45 billion in fiscal 1982, or roughly 1.5% of projected GNP.

Over the next few months the administration will be deeply engaged in the process of gaining Congressional support for its programs. The initial response has been supportive of efforts to slow the growth of federal government expenditures and to reduce the federal government's

Table 4

Fiscal trends in major industrial countries

percent of GNP

	1977	*est. 1980*
General government expenditure		
United States	32.5	33.0
Japan	30.0	30.8
Germany	46.7	46.5
France	44.9	46.5
Italy	47.5	46.0
United Kingdom	45.3	44.0
General government budget balances		
United States	—1.9	—2.0
Japan	—6.6	—7.3
Germany	—2.4	—3.5
France	—0.8	—1.0
Italy	—8.0	—8.5
United Kingdom	—3.3	—5.5

Note: general government comprises all government other than participations in enterprises producing goods and services for the market.

budget deficit. In general, Congress has been more receptive to large spending cuts and less amenable to the notion of large-scale, across-the-board reductions in personal tax rates.

In an international context, the current U.S. budget deficit is small in relation to GNP compared with the ratios in other industrial countries (see Table 4). Moreover, the present U.S. effort to reduce the size of the government sector, even if it is not successful in its entirety, is a far more ambitious undertaking than is presently being considered in any of the other industrial countries. Even in the United Kingdom, after two years of the Thatcher government, there is scarce evidence of the growth of government being kept in check. Government spending over this period is estimated to have risen by more than 45% in nominal terms and 2% in real terms.

Most of the other industrial countries except France, which has a relatively small budget deficit and a presidential election upcoming in April, are seeking to slow the growth of government expenditures and to bring their budget deficits under control. However, these efforts have met with only partial success. The German government has been among the most successful in slowing expenditures, with the current plans calling for only a 4¼% increase in 1981, or about 1% less than the anticipated inflation rate. Even so, the budget deficit is expected to rise to about DM70 billion (4½% of GNP) from DM55 billion last year. Japan has also been relatively successful in slowing the growth of government expenditures in recent years, although the budget deficit of the central government in the current fiscal year ending March 31 is estimated to approach $65-$70 billion (or about 5½% of GNP). The authorities are seeking to reduce the deficit by about $10 billion in the next fiscal year through continued expenditure restraint and increased taxes, and are striving for further reductions in the years ahead.

The governments of Belgium, the Netherlands, Italy, and Sweden also face very large deficits in relation to GNP, of 7% or more, and are attempting to bring these deficits under control. However, in each case obstacles have been encountered, such as large subsidy payments to weakened industries, inadequate parliamentary backing, or mounting transfer payments.

The thrust of the new U.S. fiscal policy is to reduce inflation as well as to stimulate output. If the goal of reducing U.S. inflation is to be attained, fiscal policy must be supportive of efforts to slow money-supply growth. This will require a concerted effort to ensure that the size of the government budget deficit is reduced significantly over the next few years. In this regard, the risks entailed in a program of large-scale cutbacks in personal income tax rates must be acknowledged. Will such a program lead to increases in the potential output of the United States, or will it mainly have the effect of boosting disposable incomes and aggregate demand? In the latter case, the United States could wind up repeating the earlier experiment of the "locomotive" strategy, although under the guise of supply-side economics. For the economic health of the United States and the rest of the world it is imperative that the United States succeed fairly rapidly in controlling inflation and reducing interest rates through a broad-based strategy that combines both fiscal and monetary restraint.

Table 5

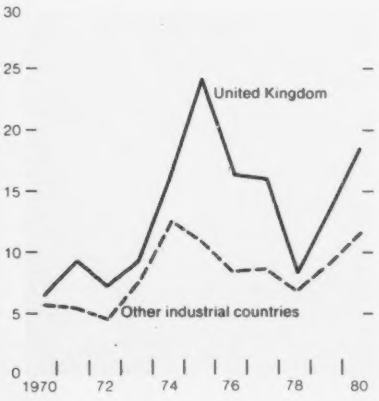
Productivity growth in manufacturing

% change at annual rates

	1960-73	1973-79
United Kingdom	4.0	0.5
United States	3.1	1.4
Canada	4.6	2.2
Japan	10.3	6.9
Germany	5.5	5.3
France	5.8	4.8
Italy	7.2	3.7

Britain's inflation performance

percent change in consumer prices from previous year



Thatcherism: A mid-term review

In May 1979, Margaret Thatcher's Conservative Party won control of the British Parliament for a term of up to five years. The government took office determined to try a radically new approach to economic policy to cure the "British disease" of chronically high inflation and slow productivity growth. The sharp rise in unemployment, the year's delay before inflation started to decline, and the protracted strength of sterling have made Mrs. Thatcher's policies controversial in Britain. With the United States economy exhibiting some of Britain's problems and having embarked on a fresh policy approach, it is timely to review two years of British policies and their successes and failures.

The economic inheritance

Mrs. Thatcher's government took over an economy with long-standing and fundamental problems. Price inflation in Britain has generally been higher than that in other major industrial countries (see chart). Associated with this has been a rapid increase in relative unit labor costs as wage increases in Britain have outstripped productivity gains to a greater extent than in other countries. Slow productivity growth, particularly in the manufacturing sector, has directly fostered this trend (see Table 5). The resulting slow growth in real incomes and frustration with living standards have expressed themselves in militant wage behavior, and sometimes anarchic industrial relations.

While there are numerous explanations for Britain's poor productivity performance, three stand out. First, industrial relations have often been unsatisfactory, especially in large-scale manufacturing industries and in the public sector. This has lowered the productivity of existing plants and hindered the rationalization and expansion of production and the introduction of new technology. Second, there is a widespread feeling that management in much of British industry has been less effective in seizing market and product opportunities, together with modernizing production processes, than its counterparts in other industrialized countries. Third, by taking over failing companies and industries — such as British Leyland, Rolls Royce, shipbuilding, and most of steel — and by intervening with investment and other subsidies in all industrial sectors, the government has removed a significant part of British industry from the discipline of the marketplace and interferred with the proper allocation of resources. This has expanded the scope of Britain's already large and under-performing government sector, which accounted for about 44% of GDP in 1980.

The short-term performance of the economy just prior to the Conservative government's taking office had been in some respects quite good. Real GDP in the second quarter of 1979 stood some 3% higher than that of a year earlier, and the unemployment rate, at 5½%, was near a three-year low. While the current account was in modest deficit, approaching self-sufficiency in oil production alleviated concern over this (see Table 6). However, inflation was over 10% on a twelve-month basis and accelerating as wage growth, formerly restrained by incomes policy, gained momentum. Labor earnings were up 13½% in the twelve months to May 1979. Moreover, the growth of the money supply, an important policy target even for the Labor government, had accelerated to a 12¾% annual rate during the previous six months. Even

Table 6

Britain's current account

in billions of dollars, seasonally adjusted annual rates

	1978	1979	1980		
			year	1st half	2nd half
Trade balance (FOB-CIF)	—6.8	—12.0	—4.5	—11.4	2.4
Fuels	—4.7	—3.1	—1.0	—2.2	0.2
Manufactures	8.7	4.4	9.0	3.2	14.8
Food, raw materials excluding fuels	—10.8	—13.3	—12.5	—12.4	—12.6
Trade balance (FOB-FOB)	—3.0	—7.4	2.9	—3.2	9.0
Invisibles	4.2	3.7	2.9	2.9	2.9[a]
Services	6.7	7.6	9.0	9.0	9.0
Interest, profits, and dividends	1.0	1.0	—0.7	—0.7	—0.7
Transfers	—3.5	—4.9	—5.4	—5.4	—5.4
Current account	1.2	—3.7	5.8	—0.3	11.8

a Fourth quarter figures are estimates.

this significantly understated the expansion of credit, since quantitative restrictions on bank lending (the "corset," which operated by penalizing rapid growth in banks' interest-bearing liabilities) diverted some credit creation outside the monetary system. In addition, the government's 1978/79 budget deficit had reached £9¼ billion (5½% of GDP) versus £8¼ billion (3½% of GDP) projected a year earlier, and £5½ billion (3¾% of GDP) in 1977/78.

Economic strategy

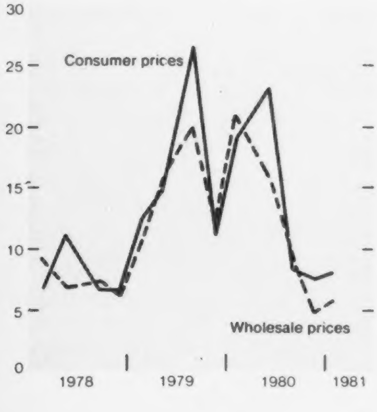
Mrs. Thatcher's strategy for dealing with these problems placed increased reliance on monetary restraint, together with market solutions and enhanced responsibility for the private sector. There have been three basic elements to the government's program. First, a sustained reduction in Britain's chronically high inflation rate was deemed essential to lower unemployment in the long run, as well as necessary to restore the moribund long-term debt market and spur capital investment. This lowering of the inflation rate was to come about through a progressive slowing of money supply growth rather than yet another round of incomes policy. Second, the size and role of the public sector in Britain was to be cut down and the budget deficit reduced. This would make available more resources, both real and financial, for the private sector and permit the lowering of interest rates. Third, measures to strengthen the supply-side response of the business sector were to be implemented. These included denationalizing and restructuring some public corporations, removing restrictions on economic activity and freeing markets, and enhancing private sector incentives. These measures were expected to improve the allocation of resources in the British economy and release pent-up energy and dynamism conspicuously absent since World War II. It was recognized from the outset that such measures could in many cases be implemented only gradually. But at the same time the government was determined not to be pushed off course by adverse short-term consequences of its policies.

Measures taken

The government intended to get off to a quick start in implementing its strategy. Given the key role that slower money supply growth was expected to play, a target of 7%-11% for the growth of sterling M3 (including coin and currency and all sterling-denominated deposits of U.K. residents) was announced in the June 1979 budget. In support of this target, the Bank of England's minimum lending rate (MLR) was increased from 12% to 14% and the corset was extended from September to December, and subsequently to June 1980. When the growth of the money supply proved less tractable than expected, MLR was raised to 17% in November 1979

Inflation in Britain

percent change from previous three months at annual rate



and left unchanged until the following summer. In July 1980, in face of a weakening domestic economy and a very strong pound, MLR was cut to 16%, and to 14% last November.

These measures to curb money supply growth were to be complemented by a reduction in the budget deficit from the £9¼ billion in 1978/79 (5½% of GDP) to £8¼ billion in 1979/80 (4% of GDP). This was to be accomplished, despite some loss in tax revenues, by cutting government expenditures from levels planned by the Labor government and reducing the borrowing needs of nationalized companies. Complicating the government's efforts to curb spending, however, was the decision to abide by the results of the Clegg Commission findings and the results of other pay comparability studies in setting civil service wages and salaries, which had been held down by the Labor government's incomes policies. This eventually produced earnings increases for civil servants of 24½% between third-quarter 1979 and third-quarter 1980.

Taxation changes in the first budget began an intended gradual shift from taxes on income toward taxes on spending. Income taxes were cut by some £4.4 billion on a full-year basis, and to reduce the disincentive effects of high marginal tax rates, the top rate on earned income was cut from 83% to 60%, compared with a cut in the standard rate from 33% to 30%. At the same time, however, indirect taxes were raised sharply to yield an additional £4.7 billion, with the value-added tax increasing from two rates of 8% and 12½% to a unified rate of 15%.

Other supply-side measures were also taken during the government's first year in office. Dividend controls were permitted to expire in the summer of 1979, and the phased elimination of exchange controls was completed in October of that year. Other measures included the start of a partial overhaul of Britain's industrial relations legislation and steps to reduce rigidity in the private housing market and to encourage labor mobility by fostering the sale of public housing units. Denationalization of public corporations was deferred, however, with the exception of the sale of part of the government's holdings in British Petroleum.

In March 1980, the government published its budget for 1980/81, and accompanied it with a medium-term financial strategy. The budget called for a reduction of about ½% in real government spending in 1980/81, with a reduction in the government deficit to £8½ billion from the £9.1 billion then estimated for 1979/80. The medium-term financial strategy called for continuing declines in real government expenditure and in the absolute level of government deficits to provide the basis for a gradual slowing of money supply growth. Between 1979/80 and 1983/84, the final year of the current Parliament's term, expenditures were to fall 5¼% in real terms, with the government deficit to decline to only 1½% of GDP. The main commitment in the strategy was for a progressive reduction in the growth of sterling M3 to 4%-8% by 1983/84.

Policy results

After a difficult start, there has been encouraging progress in the fight against inflation. The twelve-month rate increased sharply during the government's first year in office, peaking at a rate of nearly 22% in May 1980. But in the eight months since then there has been a marked deceleration, with prices rising at an 8% annual rate, bringing the twelve-month rate down to 13% in January (see chart). Since last summer, Britain's inflation rate has been below that of most industrial countries, including the United States.

Some of the government's early policy moves actually fed inflation. The increase in value-added tax rates in June 1979 tacked about 3½% onto the twelve-month rate, accounting for most of the increase from 10% to 15% between May and July of that year. At the same time, comparability studies were permitted to trigger big increases in civil service pay. These factors raised inflation and wage expectations and led to high private sector wage demands as well. For the whole economy, labor earnings increased by 22% between third-quarter 1979 and third-quarter 1980, versus 15¾% a year earlier.

Until very recently, then, little of the progress in reducing inflation could be attributed to wage moderation. Part of the improvement in the twelve-month rate reflects the dropping out of the effects of the value-added tax increase. But the remaining 5½% reduction reflects mainly two special transitory factors: a sharp squeeze in the profit margins of manufacturers and distributors and the moderation of import costs, largely because of the strong sterling exchange rate.

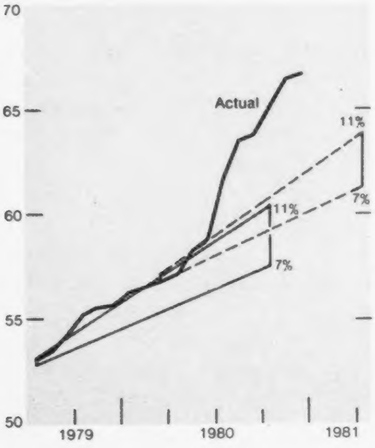
There is no scope for continued reductions in inflation from profit margin squeezes, and further increases in the sterling exchange rate are limited at best. In fact, sterling is down nearly 6% in effective terms since its late-January high with a much steeper decline against the dollar. Therefore, an indispensable requirement for sustained improvement in inflation is wage moderation. Encouragingly, there are signs that wage settlements are moving into single digits. In part this is due to lower inflation expectations, but without doubt also the growth of unemployment from 5½% to 9¼% since the summer of 1979 is causing workers to take seriously warnings about pricing themselves out of jobs — the more so in light of the expected refusal of the government to engage in large-scale bail-outs of private sector firms. At the same time, the government has made clear its intention to slow the growth of government sector pay, aiming for increases of about 6%, although some slippage appears likely.

More moderate wage settlements will probably be accompanied by substantial increases in productivity. The current recession is resulting in a long-overdue shakeout of labor and a start to the rationalization of production. These augur well for better productivity growth as the economy revives, helping to restrain the growth of unit labor costs. Thus, while the twelve-month rate may not fall this year to quite the 8% rate of the last eight months, the background for a sustained lower rate of inflation is being established.

The government has been much less successful in its efforts to curb its spending and reduce its budget deficit. The actual budget deficit during 1979/80 was £9.9 billion, in contrast to the budget forecast of £8¼ billion, or 5% of GDP versus the planned 4%. The overshoot for the current fiscal year, ended March, is likely to prove even larger. Last spring's budget projected a deficit of £8½ billion. In November, the government's projection was increased to £11½ billion, and the final figure may be closer to £13 billion. The latter figure would indicate a deficit of some 5¾% of GDP versus 3¾% had the original target been met.

One cause of the large budget deficit is the failure of the government to meet its own modest targets for reducing spending. During 1979/80, spending by the central and local governments exceeded budget estimates by some £1¼ bil-

Money supply growth and targets
in billions of pounds



lion, or about 1½% of expenditure, and worse than expected deficits of the public corporations added another £600 million. This year spending will again be well in excess of budget forecasts. In part this reflects the effects of the unexpected severity of the recession on government spending. More important, however, have been overruns in defense and local government spending, fostered by large public sector wage increases, and unexpectedly high interest-cost payments.

The failure of the government to control its spending is particularly clear in real terms. Although the government has cut expenditure from levels planned by the Labor government, spending in real terms during the current year will still be about 2% above that of 1978/79. Even if the target of a 1% cut during the coming fiscal year is realized, real public expenditures in the third year of Conservative government will be no lower than in the Labor government's last year in office. This will leave the government well behind schedule in its efforts to cut spending progressively over the medium term, and implies that all of the intended 5¼% real reduction between 1979/80 and 1983/84 will remain to be accomplished in the last two years of the period.

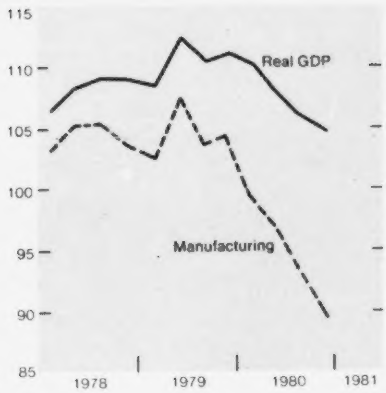
The recession is also having an effect on government revenues. Lower than expected consumer expenditures are depressing indirect tax revenues, and the increase in unemployment is slowing both income taxes and national insurance contributions. Moreover, revenues of nationalized industries will also be lower than expected in spite of a series of stiff price increases.

Unexpectedly large government deficits have been a major cause of the failure to meet money supply growth targets (see chart), forcing continuation of high interest rates. Despite the key role that tight control over the monetary growth was intended to play, it has generally been at or above the upper end of the target range. The government's first target was a 7%-11% annual rate increase in sterling M3 between June 1979 and April 1980. During the four months to October 1979, sterling M3 rose at an annual rate of 15½%, prompting the November increase in MLR from 14% to 17%. Money supply growth slowed to a 6½% annual rate between October and April, bringing it just within the target range. However, these recorded figures were biased downwards by the effects of the corset. When these quantitative controls were permitted to lapse in June 1980, the unwinding of corset-induced transactions outside normal banking channels helped produce a surge in sterling M3 growth. Despite a reaffirmation of the 7%-11% target last March and again last November, sterling M3 increased at nearly a 21% annual rate between the February 1980 base period and January 1981; of this, 3%-4% was attributable to the end of the corset.

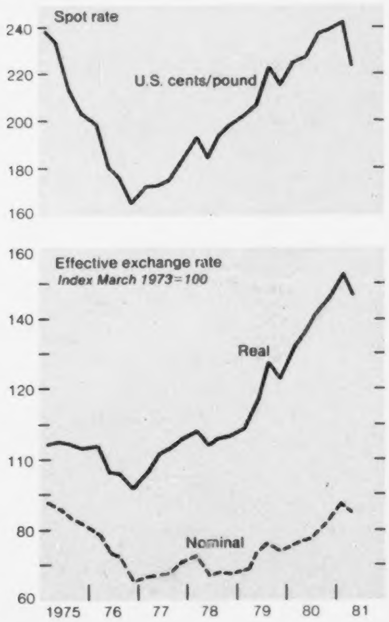
Both the financing of the unexpectedly high budget deficit and rapid monetary growth have forced the government to maintain interest rates higher than intended. This has attracted overseas capital and contributed to the strength of sterling, prompting moderate but consistent foreign exchange market sales of sterling by the authorities. Strong sterling and high interest rates have each contributed to the squeeze in corporate financial positions, forcing a resort to overdrafts in many cases. As a consequence, then, private sector borrowing has proven less sensitive to high interest rates than had been expected. These factors in turn have contributed to the growth of the money supply.

This squeeze on corporate profitability has been the main cause of the sharp drop in output and a rapid

Output in Britain
Index, 1975=100



The British pound
data are quarterly, except latest plotting



climb in unemployment (see chart). Real GDP in the fourth quarter of 1980 was down a very large 6¾% from the peak of second quarter 1979, with some further decline possible during 1981. This recession has been led by business spending, inventories and gross fixed investment, with GDP exclusive of these components virtually unchanged. The impact has been felt most strongly in the manufacturing sector, where output has fallen some 16¼% between second-quarter 1979 and fourth-quarter 1980, to levels not seen since the 1960's.

Most projections indicate only a weak recovery in economic activity. This could well be accompanied by a further deterioration in corporate finances as companies are no longer able to finance themselves by running down inventories. Thus, the most difficult period of liquidations and bankruptcies may well lie ahead.

The recession has, in turn, contributed to the very strong British current account performance during 1980. In contrast to the $3¾ billion deficit of 1979 and the government's spring projection of a 1980 deficit of $6¼ billion, the actual result for 1980 was a surplus of $5¾ billion. Only about $2¼ billion of this $9½ billion was attributable to the oil trade balance, which moved into surplus during the second half of the year. The more important factor was a 5% decline in import volume resulting from the recession, combined with a nearly 2% increase in export volume accomplished despite the softening of business activity abroad and the exceptional strength of sterling. The resulting improvement in the trade account from a deficit of $7¼ billion in 1979 to a surplus of nearly $3 billion in 1980 more than offset the estimated $825 million reduction in Britain's traditional surplus on services and transfers.

Relatively high interest rates and this large current account surplus, contrasting with the deficits of most other industrial countries, have resulted in a protracted strengthening of the pound (see chart). Since Mrs. Thatcher's government took office in May 1979, the trade-weighted average exchange rate of sterling has increased by more than 16%. Combined with an inflation differential which has been adverse throughout most of this period, this has caused an increase in the real effective exchange rate of 26½%. In comparison with its 1975-79 average, the real effective exchange rate of sterling has increased by about 38¾%.

Policy conclusions

The Achilles heel of the Thatcher government's experience to date has been its failure to cut government expenditures. The resulting large budget deficits have thrown a disproportionate burden of the fight against inflation on monetary policy. Even with interest rates at historically high levels, the money supply has grown at rates which, if sustained, could undo the progress made in reducing inflation. At the same time, high interest rates and a strong exchange rate have combined to bring extremely heavy pressures on industry. The short-term result has been larger than expected declines in output and employment. The longer-term consequence could be a weakening of Britain's industrial base that threatens the success of the government's positive supply-side measures.

The weakening of corporate finances in coming months may increase private sector demand for credit. Renewed efforts by the government to cut its deficit are required to permit lower interest rates and to minimize bankruptcies. Large-scale bailouts are no solution, leading only to excessive monetary growth and undermining market discipline and wage restraint.

The recent encouraging progress in reducing inflation provides no grounds for relaxing policies. This progress is based in large part on an undesirably high exchange rate and narrowed profit margins. The progress in reducing wage settlements must be continued if lower inflation rates are to be sustained. Avoiding another wage-price spiral through higher pay settlements as the economy begins to pull out of recession is a necessity. The government should provide strong leadership by holding increases for its own employees to levels consistent with a long-term slowing in inflation and by maintaining monetary restraint.

Most fundamentally, the government must adhere to the strategy proposed two years ago and avoid being side-tracked by the adverse short-term effects of its policies. Indeed, the worst short-term effect —the sharp rise in unemployment— has stemmed from too weak, rather than too vigorous, application of its strategy, especially with respect to cuts in public spending and lower government borrowing. It was understood from the outset that the policies adopted could succeed only with great perseverance. To abandon the strategy now would be to waste the anti-inflationary benefits painfully won from the recession, as well as those to be gained over the longer term. The alternative to the government's strategy would mean a return to the ineffective policies that led to Britain's lagging economic performance since World War II.

For the new administration in the United States, the British experience highlights clearly the necessity of a prudent balance between monetary and fiscal policy. In the present context, this means expenditure cuts more than offsetting tax cuts and a continuing reduction in the government budget deficit. Only such a policy mix offers the hope of reducing inflation and current high levels of interest rates without depressing domestic business activity.

Statistical appendix

for key to data in tables see January 1981 issue.

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Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

Effective exchange rates

Index numbers, March 1973=100. The index of the effective exchange rate for a currency is a measure of that currency's trade-weighted average appreciation or depreciation vis-à-vis the currencies of 15 other major countries. The exchange rates used in the construction of this index are the averages of daily noon spot exchange rates in New York for months and for weeks ending on dates shown. The trade weights used are based on 1976 bilateral trade in manufactures.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
pre-June 1970 parities	118.5	94.9	79.3	116.2	91.6	97.5	110.9	95.9	98.2	88.3	97.8	97.9	98.1	102.2	92.2	98.4
Smithsonian central rates	107.0	101.3	88.7	116.0	95.4	96.1	108.3	97.0	99.1	91.6	98.0	96.0	96.3	100.5	91.7	98.1
1980																
February	98.4	85.0	101.7	77.2	139.3	90.5	54.6	110.0	119.1	163.4	121.7	92.9	103.2	88.0	74.2	75.3
March	101.3	84.3	101.9	77.4	137.8	90.2	53.9	109.6	118.7	159.1	121.4	91.7	104.2	88.2	75.1	75.5
April	102.3	83.4	101.6	78.2	137.1	90.3	53.4	109.9	118.1	161.1	121.0	91.2	104.6	88.4	75.5	73.3
May	98.4	83.6	109.4	78.6	138.1	90.3	53.3	110.6	118.2	163.7	121.4	91.5	103.5	88.1	74.8	71.5
June	96.2	84.9	113.8	78.7	137.9	90.6	53.1	110.8	118.6	164.3	121.7	92.0	103.0	87.8	74.8	71.4
July	96.0	84.8	111.7	79.3	138.2	91.1	52.7	110.9	119.1	165.5	122.2	92.5	102.8	87.8	75.1	70.0
August	97.2	84.5	111.1	80.5	137.2	90.7	52.7	110.2	119.0	163.8	122.0	91.8	103.3	88.2	75.7	69.6
September	96.4	83.9	115.8	81.4	137.0	90.4	52.4	109.9	119.1	164.7	121.8	91.4	103.3	88.2	75.4	68.4
October	96.8	83.6	119.4	83.2	135.4	89.9	52.0	109.1	118.3	165.5	121.0	90.5	103.2	88.7	75.4	68.3
November	98.9	82.7	118.8	84.9	134.3	89.0	51.7	108.3	117.7	164.5	119.9	89.5	103.6	89.0	76.1	68.6
December	99.9	82.2	122.0	84.8	133.9	88.7	51.4	107.8	117.0	162.5	119.8	89.4	102.6	88.9	76.6	67.5
1981																
January	99.4	82.5	126.7	87.8	132.8	88.3	51.0	107.2	116.2	160.9	119.4	88.0	101.7	88.8	76.5	66.8
2	98.9	82.4	125.4	85.6	133.6	88.7	51.5	107.6	117.0	162.7	120.1	89.2	101.6	88.9	76.2	66.9
9	98.2	82.5	126.7	86.3	133.7	88.8	51.2	107.8	116.9	162.4	119.8	88.8	101.9	88.7	76.2	66.6
16	99.3	82.5	126.2	87.2	133.2	88.4	51.0	107.3	116.3	161.3	119.6	88.2	102.3	88.7	76.6	66.6
23	99.3	82.5	127.5	88.1	132.6	88.1	51.1	107.3	116.2	160.5	119.6	88.1	101.6	88.8	76.4	66.7
30	100.7	82.5	126.9	89.8	131.3	87.6	50.7	106.9	115.3	159.5	119.1	87.2	101.3	89.2	76.9	67.3
February 6	101.6	82.5	128.4	89.1	130.9	87.5	50.4	106.5	115.2	158.8	118.6	86.5	102.4	90.1	76.9	66.8
13	102.3	82.5	128.2	89.2	130.7	87.2	50.4	106.3	114.6	158.1	118.5	86.4	103.0	90.4	77.2	66.0
20	102.7	82.4	127.0	87.5	131.2	86.9	50.3	106.6	115.2	159.2	119.0	86.6	104.0	90.7	77.5	65.2

Real effective exchange rates

Index numbers, March 1973=100. The index of the real effective exchange rate is the index of the effective exchange rate adjusted for inflation differentials which are measured by wholesale prices of nonfood manufactures. Exchange rates and trade weights used in the construction of this index are the same as those used for effective exchange rate indices. Annual figures are averages of months.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
1977	100.1	99.8	93.7	101.7	102.7	96.6	92.4	100.0	104.0	105.7	109.6	97.5	99.8	105.2	92.0	101.4
1978	95.4	92.9	107.5	106.5	103.4	97.3	90.9	99.9	103.9	122.4	109.7	103.7	95.6	96.7	87.3	97.3
1979	95.6	92.9	96.2	118.9	104.2	99.2	90.7	97.3	100.5	115.7	108.5	101.8	90.5	99.4	86.1	109.4
1980	97.8	91.6	93.9	137.1	101.2	101.0	92.0	92.2	97.9	105.5	108.7	93.7	91.7	101.3	87.9	106.9
1980																
February	96.7	94.6	85.3	131.8	103.5	99.9	93.8	94.1	99.2	107.3	110.2	94.8	92.6	101.0	87.0	112.3
March	100.2	92.2	86.5	133.0	102.1	100.4	92.5	93.0	98.3	104.0	109.4	94.2	93.2	101.4	87.5	111.5
April	101.9	90.5	87.0	134.5	101.6	100.5	92.1	93.1	97.3	105.0	108.3	93.5	93.3	100.8	87.1	107.5
May	97.9	90.4	94.0	135.9	102.1	100.3	92.8	93.4	97.3	106.2	109.3	94.2	92.7	100.5	86.1	104.9
June	95.7	91.9	97.8	137.3	101.8	100.4	92.9	93.3	97.2	105.9	109.7	94.3	91.7	100.3	86.0	105.8
July	95.9	91.8	95.1	138.5	101.5	101.3	92.8	92.9	97.7	106.1	110.4	96.0	92.0	100.1	86.9	104.4
August	96.9	91.5	94.7	140.6	100.5	102.3	92.8	91.6	97.2	104.3	109.9	95.7	91.8	100.7	88.3	104.3
September	95.4	91.6	98.6	142.3	100.0	102.3	93.2	91.9	96.8	104.6	109.5	94.1	92.6	101.0	88.2	103.2
October	96.8	91.1	99.9	144.8	98.8	102.0	92.6	91.6	95.5	104.7	108.4	93.9	93.1	101.2	88.2	103.0
November	98.7	90.3	98.5	147.0	98.2	100.7	93.3	91.1	94.4	104.3	106.9	92.7	93.7	101.4	90.0	103.5
December	99.7	89.8	100.8	146.2	98.7	100.3	93.4	90.3	93.3	102.5	105.9	92.3	92.8	101.2	90.8	102.3
1981																
January	99.5	90.2	103.8	151.2	97.4	100.4	93.0	89.9	92.2	101.9	105.4	91.0	92.6	101.0	91.3	101.5

Euro-currency market size

based on foreign-currency liabilities and claims of banks in major European countries, the Bahamas, Bahrain, Cayman Islands, Panama, Canada, Japan, Hong Kong, and Singapore billions of dollars (rounded to nearest $5 billion), at end of period

	1971	*1972*	*1973*	*1974*	*1975*	*1976*	*1977*	*1978*	*1979*	*1980*	
										Jun	*Sep*
Estimated size											
Gross	150	205	310	390	480	590	725	925	1 185	1 310	1 370
Liabilities to nonbanks	30	35	55	75	80	100	125	170	230	265	n.a.
Liabilities to central banks	15	25	40	60	70	85	110	120	155	160	n.a.
Liabilities to other banks[a]	105	145	215	255	330	405	490	635	800	885	n.a.
Net	85	110	160	215	250	310	380	485	600	670	700
Claims on nonbanks	35	45	65	100	115	150	195	245	295	340	n.a.
Claims on central banks and on banks outside market area[b]	35	45	75	95	115	135	155	195	245	260	n.a.
Conversions of Euro funds into domestic currencies by banks in market area[c]	15	20	20	20	20	25	30	45	60	70	n.a.
Euro-dollars as % of gross liabilities in all Euro-currencies	76	78	73	77	78	79	76	74	72	72	n.a.

[a] Includes unallocated liabilities
[b] Includes unallocated claims
[c] In European market area only
r revised
p preliminary

Euro-currency deposit rates

prime banks' bid rates in London, at or near end of month

	1977	*1978*	*1979*	*1980*							*1981*
	Dec	*Dec*	*Dec*	*Jun*	*Jul*	*Aug*	*Sep*	*Oct*	*Nov*	*Dec*	*Jan*
Euro-dollar:											
overnight	7.12	10.62	14.00	9.50	9.12	10.50	12.50	13.25	18.50	19.25	17.50
7-day fixed	6.31	10.62	14.00	9.50	9.25	10.62	12.50	13.50	18.50	19.75	17.50
one month	6.87	11.00	14.37	9.50	9.50	11.19	13.19	14.50	18.37	19.12	17.68
three months	7.19	11.69	14.44	9.75	9.81	12.25	13.81	15.37	18.06	17.62	17.50
six months	7.50	12.31	14.44	9.94	10.06	12.50	13.94	14.87	16.87	16.75	16.75
twelve months	7.67	12.00	12.87	9.87	10.19	12.50	13.69	14.12	15.50	14.87	15.75
Euro-mark:											
one month	2.19	3.19	8.50	9.50	8.69	8.62	8.87	8.81	9.69	8.87	9.31
three months	2.50	3.31	8.56	9.37	8.25	8.50	8.87	8.94	9.56	8.87	9.37
six months	2.81	3.69	8.56	8.81	7.81	8.31	8.87	8.81	9.31	8.87	9.37
twelve months	3.06	3.81	8.12	8.19	7.75	8.12	8.69	8.56	9.37	8.93	9.31
Euro-Swiss franc:											
one month	1.31	—.06	5.19	5.62	5.06	6.00	5.25	4.12	6.12	6.00	5.50
three months	1.37	0.00	5.75	5.69	5.12	5.87	5.75	5.44	6.12	6.00	6.00
six months	1.87	0.12	5.87	5.69	5.25	5.75	5.75	5.12	6.12	5.75	6.00
twelve months	2.25	0.62	5.56	5.12	5.00	5.50	5.62	5.37	6.19	5.50	6.12
Euro-sterling:											
one month	6.50	12.00	16.75	17.37	16.87	16.75	16.25	17.00	14.50	14.75	14.25
three months	6.62	12.62	16.75	16.75	15.62	16.62	15.87	16.75	14.62	14.75	13.75
six months	7.12	13.25	16.75	15.25	14.25	16.25	15.00	16.12	14.44	14.25	13.12
twelve months	7.37	13.00	15.25	14.00	13.25	15.12	14.37	15.00	14.00	14.00	13.12
Euro-French franc:											
one month	12.25	10.50	13.87	12.25	12.37	12.00	11.62	11.00	10.50	11.12	10.37
three months	13.25	9.87	14.00	12.25	12.12	12.12	12.06	11.31	11.37	11.75	10.87
six months	14.00	9.87	14.12	12.25	12.00	12.37	12.56	12.00	12.37	12.25	11.87
twelve months	13.25	10.25	13.75	12.25	11.94	12.62	12.81	12.62	13.00	12.87	12.62
Euro-yen:											
one month	0.62	—.69	7.62	13.00	12.87	11.62	12.50	10.00	10.25	9.12	8.25
three months	1.81	0.62	8.31	12.25	12.25	11.62	12.25	9.62	10.12	9.25	8.50
six months	2.75	1.87	8.62	11.12	11.37	11.12	11.50	9.12	10.12	9.62	8.50
twelve months	3.25	2.19	7.94	9.37	9.75	9.75	10.50	9.00	9.37	9.37	8.50

Euro-currency bank credits

publicly-announced in period, in millions of dollars

	1978	1979	1980	1980	1981		Jan-Feb	
				Dec[r]	Jan[r]	Feb[p]	1981	1980
Industrial countries	**28 952**	**27 248**	**39 775**	**6 616**	**6 176**	**742**	**6 918**	**3 369**
Australia	212	941	2 475	—	91	—	91	112
Canada	5 705	1 845	1 743	—	—	200	200	—
Denmark	2 242	1 205	1 720	255	200	—	200	23
Finland	550	92	1 040	--	65	150	215	150
France	1 914	2 955	1 745	—	375	—	375	—
Greece	508	1 009	1 333	16	200	—	200	63
Ireland	616	687	237	—	24	—	24	—
Italy	2 485	3 708	6 593	439	2 505	225	2 730	513
Norway	1 517	935	685	20	10	37	47	131
Spain	2 426	4 184	5 457	948	604	80	684	898
Sweden	1 872	1 263	1 720	—	1 304	—	1 304	233
United Kingdom	3 898	795	1 470	—	—	—	—	230
United States	1 206	2 348	6 719	4 320	350	50	400	309
Other[a]	3 801	5 281	6 838	618	448	—	648	70
Developing countries	**37 290**	**47 964**	**35 034**	**2 041**	**3 084**	**2 405**	**5 489**	**3 247**
Non-OPEC countries	26 669	35 225	23 535	1 500	2 432	1 465	**3 897**	**2 163**
Argentina	1 461	2 965	2 506	130	250	265	515	195
Brazil	5 634	6 278	4 158	25	297	—	297	40
Chile	1 045	867	1 322	178	195	—	195	70
Korea	2 651	3 258	1 917	95	128	235	363	776
Malaysia	858	1 168	—	—	30	—	30	—
Mexico	7 250	8 243	5 971	450	730	625	1 355	195
Morocco	605	499	420	—	140	—	140	—
Peru	—	596	480	55	—	—	—	40
Philippines	2 073	2 067	1 056	200	77	—	77	222
Taiwan	254	1 063	314	34	—	200	200	—
Other[b]	4 838	8 221	5 391	333	585	140	725	625
OPEC countries	10 621	12 739	11 499	541	652	940	1 592	1 083
Algeria	2 576	1 906	40	—	—	—	—	—
Indonesia	1 118	1 061	1 435	400	3	—	3	160
Nigeria	825	1 373	1 330	—	75	210	285	230
United Arab Emirates	726	401	101	1	--	—	—	58
Venezuela	2 054	6 830	6 715	123	510	570	1 080	305
Other	3 322	1 168	1 878	17	64	160	224	330
Communist countries	**3 767**	**7 325**	**2 809**	**200**	**250**	**280**	**530**	**479**
China	—	3 395	181	—	—	—	—	—
East Germany	642	796	303	—	250	—	250	--
Hungary	700	260	550	—	—	150	150	249
Poland	374	849	800	—	—	—	—	29
Other[c]	2 051	2 025	975	200	—	130	130	201
International organizations	**160**	**275**	**429**	—	—	—	—	—
TOTAL	**70 169**	**82 812**	**78 047**	**8 857**	**9 510**	**3 427**	**12 937**	**7 095**

a includes multi-national organizations *b* includes regional development organizations *c* includes COMECON institutions *p* preliminary
r revised

International bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980							1981
	Dec	Dec	Dec	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
U.S. companies:											
U.S. dollar	7.95	8.55	10.13	9.83	9.99	10.60	10.73	11.27	11.46	11.76	11.94
Swiss franc	5.31	5.70	6.61	7.29	7.28	7.30	7.28	7.26	7.38	7.27	7.44
European companies:											
U.S. dollar	8.42	9.21	10.93	10.53	10.72	11.47	11.71	12.04	12.23	12.42	12.53
German mark	6.80	6.84	7.55	7.76	7.63	7.85	8.31	8.66	8.82	8.79	8.85
Governments:											
U.S. dollar	8.42	9.12	10.66	10.47	10.50	10.90	11.08	11.22	11.27	11.83	11.93

New international bond issues

new issues in period, in millions of dollars

	1978	*1979*	*1980*	*1980*	*1981*		*Jan-Feb*	
				Decr	*Janr*	*Febp*	*1981*	*1980*
By type:								
Euro-bonds, total	**14 125**	**18 726**	**23 959**	**1 574**	**2 759**	**1 322**	**4 081**	**2 226**
by category of borrower								
U.S. companies	1 122	2 872	4 100	207	415	552	967	159
Foreign companies	4 540	7 183	9 032	672	772	323	1 095	767
State enterprises	3 291	4 524	5 835	313	797	350	1 147	730
Governments	3 643	2 433	3 045	219	610	—	610	530
International organizations	1 529	1 714	1 947	262	165	97	262	40
by currency of denomination								
U.S. dollar	7 290	12 565	16 420	1 231	2 400	1 097	3 497	370
German mark	5 251	3 626	3 607	63	—	—	—	725
Dutch guilder	394	531	1 050	28	49	43	92	98
Canadian dollar	—	425	279	—	—	—	—	—
European unit of account	165	253	65	—	32	—	32	—
Other	1 025	1 326	2 538	252	278	182	460	241
Foreign bonds outside the United States, total	**14 359**	**17 749**	**14 521**	**850**	**1 125**	**827**	**1 952**	**3 048**
by category of borrower								
U.S. companies	245	217	307	—	10	118	128	—
Foreign companies	2 110	3 463	3 157	274	469	237	706	353
State enterprises	3 163	3 284	2 830	177	290	99	389	421
Governments	5 771	7 663	4 086	52	269	97	366	1 821
International organizations	3 070	3 122	4 141	347	87	276	363	453
by currency of denomination								
German mark	3 789	5 379	4 839	252	5	103	108	1 559
Swiss franc	5 698	9 777	7 617	505	926	499	1 425	1 098
Dutch guilder	385	75	259	—	45	—	45	31
Japanese yen	3 826	1 833	1 088	—	98	218	316	229
Other	671	685	718	93	51	7	58	131
Foreign bonds in the United States, total	**5 795**	**4 515**	**3 429**	**220**	**40**	**—**	**40**	**614**
by category of borrower								
Canadian entities	3 142	2 193	2 136	—	11	—	11	292
International organizations	459	1 100	550	—	—	—	—	250
Other	2 194	1 222	743	220	29	—	29	72
By country of borrower:								
Industrial countries	**24 964**	**31 886**	**32 721**	**1 889**	**3 583**	**1 608**	**5 191**	**4 969**
Australia	1 218	593	539	—	—	—	—	230
Austria	1 027	1 218	1 859	142	192	—	192	225
Canada	4 764	4 197	3 797	148	371	177	548	420
Denmark	1 018	752	1 125	17	—	—	—	176
Finland	952	699	392	—	5	—	5	160
France	1 286	2 106	2 729	220	539	183	722	308
Japan	3 467	5 775	5 309	401	532	204	736	704
Netherlands	251	832	1 592	56	49	76	125	87
New Zealand	744	553	293	—	598	—	598	—
Norway	2 751	1 955	892	123	40	—	40	283
Sweden	876	1 530	3 244	429	255	168	423	412
United Kingdom	1 365	1 181	1 733	—	100	—	100	120
United States	2 973	6 767	5 580	207	425	670	1 095	1 332
Developing countries	**4 227**	**3 093**	**2 485**	**245**	**59**	**168**	**227**	**176**
Non-OPEC countries	2 684	2 675	1 942	245	59	150	209	106
Brazil	843	930	349	—	—	—	—	—
Mexico	568	363	544	105	29	100	129	37
Philippines	170	175	70	—	—	30	30	—
OPEC countries	1 543	418	543	—	—	18	18	70
Algeria	721	208	—	—	—	—	—	—
Venezuela	588	55	398	—	—	—	—	70
Communist countries	**30**	**75**	**65**	**—**	**30**	**—**	**30**	**—**
Hungary	—	—	65	—	—	—	—	—
International organizations	**5 058**	**5 936**	**6 638**	**510**	**252**	**373**	**625**	**743**
TOTAL	**34 279**	**40 990**	**41 909**	**2 644**	**3 924**	**2 149**	**6 073**	**5 887**

Central bank discount rates

	1977	1978	1979	1980				Current	
	end Dec	end Dec	end Dec	end Mar	end Jun	end Sep	end Dec	Feb 25 1981	effective since
United States	6.00	9.50	12.00	16.00[a]	11.00	11.00	13.00	13.00	Dec 5, 80
Canada	7.50	10.75	14.00	14.19	11.83	11.20	17.36	17.14	Feb 19, 81
Japan	4.25	3.50	6.25	9.00	9.00	8.25	7.25	7.25	Nov 5, 80
United Kingdom	7.00	12.50	17.00	17.00	17.00	16.00	14.00	14.00	Nov 25, 80
Belgium	9.00	6.00	10.50	14.00	13.00	12.00	12.00	12.00	Jul 31, 80
France	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	3.00	3.00	6.00	7.00	7.50	7.50	7.50	7.50	May 2, 80
Italy	11.50	10.50	15.00	15.00	15.00	16.50	16.50	16.50	Sep 29, 80
Netherlands	4.50	6.50	9.50	9.50	9.50	8.50	8.00	8.00	Oct 21, 80
Austria	5.50	4.50	3.75	6.75	6.75	6.75	6.75	6.75	Mar 21, 80
Denmark	9.00	8.00	11.00	13.00	13.00	12.00	11.00	11.00	Oct 27, 80
Finland	8.25	7.25	8.50	9.25	9.25	9.25	9.25	9.25	Feb 1, 80
Ireland	6.75	11.85	16.40	16.85	16.85	13.50	12.75	12.75	Oct 10, 80
Norway	6.00	7.00	9.00	9.00	9.00	9.00	9.00	9.00	Nov 30, 79
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	Jul 26, 77
Sweden	8.00	6.50	9.00	10.00	10.00	10.00	10.00	12.00	Jan 20, 81
Switzerland	1.50	1.00	2.00	3.00	3.00	3.00	3.00	4.00	Feb 20, 81
Argentina	165.27	108.19	89.90	74.98	85.86	69.64	87.01	87.01	Dec 26, 80
Brazil	28.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	Jul, 78
Korea	14.00	14.50	14.50	20.50	19.50	17.50	15.50	15.50	Nov 11, 80
New Zealand	10.00	10.50	13.00	13.00	13.00	14.00	14.00	14.00	Jul, 80
Philippines	6.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	May 19, 78
Singapore	3.50	4.50	6.75	8.50	8.50	8.75	10.50	11.00	Jan 12, 81
South Africa	9.00	8.50	7.00	7.00	7.00	7.00	7.00	8.00	Feb 3, 81
Venezuela	7.00	7.50	11.00	12.00	10.00	10.00	13.00	13.00	Nov 14, 80

a: applicable to large banks; 13% for other banks

Day-to-day money rates

monthly averages

	1977	1978	1979	1980							1981
	Dec	Dec	Dec	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
United States	6.56	10.03	13.78	9.47	9.03	9.61	10.87	12.81	15.85	18.90	19.08
Canada	6.84	9.44	13.83	11.37	10.20	9.86	9.82	10.70	11.05	15.61	16.93
Japan	5.01	4.57	8.02	12.62	12.68	12.11	11.40	11.00	9.61	9.49	8.90
Australia	9.96	8.40	7.84	10.34	10.91	9.63	9.81	8.96	9.84	9.51	9.69
United Kingdom	4.81	10.00	14.87	14.06	15.06	14.87	14.90	15.00	12.25	13.00	12.19
Belgium	7.48	6.73	10.65	12.43	11.87	10.01	9.64	9.60	10.16	9.68	10.32
France	9.30	6.67	12.17	12.43	12.04	11.32	11.37	11.22	10.74	10.87	10.73
Germany	3.24	3.61	9.15	10.04	9.81	8.95	9.28	8.98	8.82	9.13	9.13
Italy	11.37	11.00	16.00	16.87	16.87	16.87	16.87	17.87	17.62	17.50	17.37
Netherlands	5.27	10.00	15.67	11.01	10.34	10.11	9.75	9.30	9.00	8.37	8.95
Austria	9.25	5.37	8.50	10.50	10.75	10.25	11.00	11.00	11.50	11.50	9.50
Finland	22.99	9.29	13.53	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50
Ireland	8.00	12.12	16.88	17.38	16.81	13.75	13.62	13.25	13.38	13.31	13.44
Spain	7.22	16.75	9.61	14.22	12.71	12.57	13.16	14.38	15.24	16.74	15.89
Sweden	8.91	6.26	11.99	12.74	11.75	12.90	11.95	13.00	11.80	11.41	12.75
Switzerland	0.85	0.00	1.25	3.75	2.50	6.50	2.00	0.87	3.37	5.75	3.75
Argentina	n.a.	n.a.	78.22	64.92	83.39	52.89	51.36	54.58	58.04	70.84	74.81
Brazil	28.44	35.64	32.28	25.56	30.84	31.80	35.76	38.28	40.56	49.68	51.60
Hong Kong	4.87	9.67	14.19	8.00	7.25	8.75	8.31	10.87	13.87	14.05	14.18
Korea	14.40	15.00	15.00	19.20	19.20	19.20	17.22	17.22	14.82	14.82	14.82
Philippines	14.44	13.22	16.25	11.33	10.44	6.47	9.71	9.26	13.10	15.70	13.66
Singapore	3.59	4.98	10.17	9.42	9.15	8.97	10.75	14.53	11.06	10.23	11.77
South Africa	7.65	7.11	3.81	4.37	4.26	4.15	4.35	4.47	4.99	5.60	6.22
Euro-dollars	6.94	10.80	14.41	9.58	9.13	9.86	10.96	13.18	16.15	19.22	19.05

Treasury bill rates

bond-equivalent yields, at or near end of month

	1977	1978	1979	1980							1981
	Dec	Dec	Dec	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
United States	6.33	9.42	12.39	7.90	9.12	10.70	11.09	13.07	14.84	14.87	15.83
Canada	7.17	10.46	13.66	10.24	10.06	10.49	10.95	11.91	13.70	17.01	16.86
Japan	4.15	3.39	5.68	6.82	6.82	6.82	6.44	6.44	5.93	5.93	5.93
Australia	8.35	8.35	9.31	10.79	10.64	10.53	10.56	10.95	11.47	12.17	12.42
United Kingdom	6.42	12.01	16.45	16.29	14.69	15.00	14.37	14.44	13.38	13.45	12.53
Belgium	9.25	9.25	14.40	13.75	12.75	12.35	12.35	12.10	12.75	12.75	12.10
Ireland	6.74	11.83	16.37	16.57	16.46	13.47	13.43	12.72	12.78	12.84	12.83
Italy	12.81	12.81	15.62	16.12	16.25	16.12	16.00	16.87	16.87	16.87	17.69
Netherlands	6.00	9.50	12.75	10.37	9.87	10.25	9.25	8.85	8.75	8.00	8.75
Sweden	9.21	5.84	9.74	12.89	12.84	12.84	12.90	12.90	12.90	12.87	16.85
Argentina	109.06	82.55	71.04	70.26	70.43	48.60	51.03	58.31	60.73	66.19	69.10
Brazil	38.08	41.21	27.84	33.84	39.14	42.66	43.70	50.18	66.34	76.84	78.24
Korea	16.88	17.01	19.53	22.01	22.01	22.01	19.50	19.50	16.35	16.35	18.98
Mexico	n.a.	12.75	17.89	21.55	20.91	21.36	23.42	24.73	25.81	n.a.	n.a.
New Zealand	7.50	10.50	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.50
Philippines	10.04	12.08	12.63	12.46	12.54	12.66	12.67	12.70	12.75	12.74	12.65
Singapore	3.17	4.01	6.18	6.85	6.79	6.89	6.99	6.98	6.86	6.77	6.86
South Africa	8.17	7.61	4.30	4.72	4.47	4.64	4.84	5.13	5.71	6.31	6.89

Representative money-market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money-market instruments, other than Treasury bills, at or near end of month

	1977	1978	1979	1980							1981
	Dec	Dec	Dec	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
United States	6.84	10.57	13.70	8.03	8.82	10.91	12.24	14.24	17.15	17.62	16.67
Canada	7.25	10.62	14.15	11.50	10.60	10.75	11.10	12.50	14.10	17.50	16.95
Japan	5.89	4.64	8.01	10.57	11.54	10.95	11.48	9.57	9.80	9.80	8.32
Australia	9.75	9.10	10.30	13.00	12.50	12.40	12.00	11.70	11.75	13.00	13.25
United Kingdom	6.50	12.50	17.00	17.00	14.87	16.69	15.87	16.62	14.50	14.75	13.19
Belgium	9.50	9.25	14.45	14.00	13.00	12.60	12.60	12.45	13.00	13.10	12.35
France	9.19	6.44	12.62	12.25	11.44	11.62	12.31	11.31	11.44	11.56	11.25
Germany	3.60	3.70	8.70	9.95	9.30	8.90	9.10	9.20	9.45	10.20	9.45
Ireland	6.75	13.00	18.12	17.50	16.75	14.50	13.75	13.37	13.75	13.62	13.87
Italy	11.75	11.37	17.12	17.25	17.25	17.25	18.75	17.75	17.37	17.37	17.37
Netherlands	6.25	10.50	13.00	10.62	9.37	10.75	10.37	9.25	10.00	9.37	9.50
Spain	12.06	22.80	13.20	16.90	15.00	14.60	14.40	15.30	16.00	17.40	17.40
Switzerland	2.02	0.50	6.12	5.87	5.25	6.12	5.87	5.62	6.12	7.50	6.00
Hong Kong	5.73	11.82	14.37	8.75	7.94	9.25	10.44	12.56	15.87	17.69	15.53
Korea	16.88	17.01	19.53	22.01	22.01	22.01	19.27	19.27	16.35	16.35	16.35
New Zealand	11.87	12.00	16.00	13.50	13.25	13.40	14.00	14.25	14.10	14.25	14.35
Philippines	11.96	11.48	10.41	12.22	9.96	10.92	10.97	11.96	13.15	15.01	15.98
Singapore	4.81	7.38	10.12	9.75	9.50	9.50	11.62	13.62	14.12	14.12	14.25
South Africa	9.00	7.85	4.72	5.24	4.93	4.93	5.00	5.05	6.07	7.12	8.42

Commercial bank deposit rates

at or near end of month

	1977	1978	1979	1980							1981
	Dec	Dec	Dec	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
United States	6.80	10.90	13.55	8.90	8.90	11.55	12.25	14.25	17.07	16.25	16.00
Canada	7.25	10.45	14.05	11.00	10.50	10.75	10.65	12.40	13.95	17.00	16.90
Japan	3.25	2.50	8.37	11.00	11.50	11.00	11.30	9.50	9.90	9.00	8.72
Australia	9.50	8.50	10.25	13.33	12.41	12.03	11.33	10.95	11.21	12.71	12.85
United Kingdom	6.37	12.25	16.81	16.88	15.87	16.75	15.94	16.75	14.44	14.87	13.44
Belgium	9.50	9.87	14.50	14.00	12.50	12.63	12.50	12.13	13.00	12.63	12.13
France	9.00	6.50	12.50	11.75	11.25	11.62	11.75	11.00	11.50	11.25	11.25
Germany	3.40	3.50	7.75	9.00	8.60	8.40	8.40	8.40	8.75	8.00	8.70
Italy	17.00	12.50	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25
Netherlands	7.00	11.62	13.50	10.75	9.50	10.62	10.25	9.75	10.25	9.50	9.62
Austria	9.00	6.75	8.50	10.37	10.75	11.37	11.62	11.50	11.50	11.25	10.00
Denmark	8.00	7.00	10.00	12.00	12.00	12.00	11.00	10.00	10.00	10.00	10.00
Finland	4.25	3.25	4.25	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Ireland	6.87	12.75	17.87	17.37	16.25	14.00	13.87	13.25	13.75	13.62	13.50
Norway	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Spain	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Sweden	7.75	6.25	8.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	11.75
Switzerland	1.12	0.12	4.75	5.25	4.75	5.00	5.25	5.62	6.12	7.50	6.12
Argentina	n.a.	86.63	72.64	68.62	70.57	53.05	50.61	59.00	62.00	72.00	76.50
Brazil	39.60	46.80	45.00	43.80	45.24	47.40	49.56	54.48	61.20	69.48	72.00
Hong Kong	1.75	4.50	9.25	6.50	6.00	6.00	6.00	9.00	13.00	13.00	13.00
Korea	13.20	15.00	15.00	19.20	19.20	19.20	17.22	17.22	14.82	14.82	14.82
Mexico	11.00	12.00	16.75	19.13	18.20	18.98	20.74	21.74	23.25	n.a.	n.a.
New Zealand	11.00	12.00	15.90	13.25	13.25	13.30	13.05	13.50	13.50	13.50	13.75
Philippines	8.50	8.50	10.50	10.50	10.50	14.00	14.00	14.00	14.00	14.00	14.00
Singapore	5.31	7.31	10.31	9.06	8.69	9.38	11.44	13.00	13.50	13.19	12.62
South Africa	8.70	7.30	4.82	5.15	4.75	4.77	4.90	5.10	6.62	7.87	9.25
Venezuela	7.00	7.25	15.00	12.00	12.00	12.00	12.00	12.00	12.00	16.00	16.00

Commercial bank lending rates to prime borrowers

at or near end of month

	1977	1978	1979	1980							1981
	Dec	Dec	Dec	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
United States	7.75	11.75	15.25	11.50	11.00	11.50	13.00	14.50	17.75	21.50	20.00
Canada	8.25	11.50	15.00	13.25	12.50	12.50	12.25	12.75	14.50	18.25	18.25
Japan	5.47	4.50	6.51	9.27	9.34	9.27	8.99	8.82	8.58	8.30	8.00
Australia	11.50	11.00	10.75	12.50	12.50	12.50	12.50	12.50	12.50	13.50	13.50
United Kingdom	8.00	13.50	18.00	17.50	17.50	17.50	17.50	17.50	15.00	15.00	15.00
Belgium	10.00	10.00	15.25	17.25	17.00	15.75	15.75	15.75	15.75	15.75	15.25
France	11.35	10.95	13.65	14.15	13.90	13.40	13.40	13.40	13.40	13.40	13.40
Germany	6.00	5.50	9.75	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50
Italy	16.00	15.00	19.50	19.50	19.50	19.50	19.50	19.50	21.00	20.50	20.50
Netherlands	7.00	12.00	15.00	12.00	11.25	11.75	11.25	10.25	10.75	10.75	10.50
Austria	9.75	8.75	8.50	11.00	11.00	11.00	12.00	12.00	12.25	12.50	12.50
Denmark	12.50	10.00	13.75	15.75	15.75	15.75	14.75	13.75	13.75	13.75	13.75
Finland	8.85	7.87	9.06	9.86	9.84	9.83	9.84	9.83	9.82	n.a.	n.a.
Ireland	8.25	13.75	16.00	18.50	17.50	15.50	15.50	14.50	14.50	14.50	14.50
Norway	8.33	11.00	11.00	11.00	11.00	11.00	12.50	12.50	12.50	12.50	12.50
Spain	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00
Sweden	10.25	8.50	10.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	13.75
Switzerland	5.75	5.00	5.00	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75
Argentina	152.08	86.75	80.00	75.50	74.50	58.50	53.00	60.00	66.00	77.00	81.00
Brazil	52.05	61.70	57.00	57.00	57.00	57.00	57.00	57.00	88.00	88.00	133.75
Hong Kong	4.75	8.75	14.50	12.00	10.00	10.00	10.50	13.00	17.00	17.00	17.00
Korea	15.00	18.50	18.50	23.50	23.50	23.50	21.50	21.50	19.50	19.50	19.50
Mexico	17.00	17.50	19.00	22.47	22.53	22.82	23.51	24.42	24.77	26.25	n.a.
New Zealand	8.50	9.75	11.75	12.75	12.75	12.75	13.00	13.00	13.00	13.00	13.00
Philippines	14.00	14.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
Singapore	7.02	7.65	9.50	11.40	11.10	10.95	11.30	12.60	13.55	13.60	14.30
South Africa	12.50	11.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	10.00
Venezuela	9.50	10.25	13.00	12.00	12.00	12.00	12.00	12.00	12.00	15.00	15.00

Domestic government bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980							1981
	Dec	Dec	Dec	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
United States	7.97	9.00	10.20	9.90	10.70	11.46	11.90	12.33	12.25	11.46	12.76
Canada	8.77	9.68	11.32	11.29	12.32	12.42	12.98	13.22	13.01	12.69	12.96
Japan	6.40	6.40	8.63	8.45	8.63	8.77	8.92	8.84	9.26	9.04	8.84
Australia	9.50	8.90	10.45	11.80	11.80	11.85	12.00	12.40	12.60	13.00	13.10
United Kingdom	10.53	12.75	13.83	13.06	12.52	13.27	12.69	12.52	12.65	13.05	13.25
Belgium	8.76	8.80	11.13	11.84	11.77	12.08	12.43	12.46	12.61	13.04	13.19
France	11.07	9.94	12.59	13.34	13.43	13.46	13.85	14.27	14.24	14.31	14.58
Germany	5.52	6.65	7.91	8.00	7.78	7.95	8.24	8.55	8.59	9.19	9.07
Italy	10.82	10.89	11.28	11.80	12.06	12.00	12.12	12.53	12.42	12.12	12.44
Netherlands	8.11	8.48	9.29	9.95	9.66	10.08	10.25	10.20	10.46	10.48	10.43
Austria	9.00	7.91	8.20	9.04	9.21	9.62	9.61	9.90	10.11	9.62	n.a.
Denmark	16.83	17.27	18.28	20.90	19.95	20.71	20.29	19.24	19.40	19.62	18.56
Finland	10.25	9.19	9.58	10.44	10.49	10.52	10.35	10.48	10.43	10.42	n.a.
Ireland	11.30	13.44	16.64	15.78	14.64	14.49	14.57	14.77	14.91	15.63	n.a.
Norway	8.37	8.19	10.04	10.16	10.21	10.73	n.a.	10.40	10.44	10.44	11.70
Sweden	9.84	10.09	11.22	11.38	11.38	11.46	12.63	12.68	12.71	12.61	n.a.
Switzerland	3.75	3.03	4.20	4.72	4.59	4.87	4.85	4.69	4.67	4.63	4.79
Argentina	181.65	112.18	47.94	57.33	81.94	42.24	40.46	38.21	101.38	36.84	34.97
New Zealand	10.00	10.02	12.98	13.49	13.40	13.25	12.98	12.96	12.96	12.99	n.a.
Philippines	13.40	13.40	13.20	13.40	13.40	13.40	13.40	13.40	13.40	13.40	13.40
South Africa	10.75	9.85	9.44	9.85	10.00	10.05	10.62	11.10	11.75	11.80	12.67
Venezuela	7.24	7.24	7.29	7.45	7.45	7.37	7.40	7.40	7.43	7.39	7.44

Domestic corporate bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980							1981
	Dec	Dec	Dec	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
United States	8.30	9.25	10.75	10.63	11.65	12.50	12.88	13.38	13.38	13.00	13.63
Canada	9.71	10.34	12.07	12.14	13.13	13.35	13.74	13.95	13.72	13.62	13.84
Japan	6.68	6.94	8.34	8.23	8.20	8.24	8.44	8.48	8.60	8.60	8.49
Australia	11.00	10.25	11.65	13.15	13.15	13.25	13.35	13.75	14.00	14.25	14.25
United Kingdom	11.88	13.53	14.96	13.98	13.33	13.90	13.78	13.61	13.63	14.21	14.20
Belgium	9.85	9.58	11.93	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
France	12.09	10.27	12.92	14.16	13.93	13.86	14.03	14.69	14.83	15.23	14.62
Germany	5.92	6.80	8.20	8.90	8.40	8.10	8.40	8.80	9.30	9.50	9.50
Italy	10.71	10.12	10.22	14.12	14.19	13.73	13.31	12.64	12.65	12.99	12.80
Netherlands	7.90	8.62	9.95	9.96	9.83	10.33	10.49	10.48	10.33	10.71	10.46
Norway	8.59	8.37	10.53	10.46	10.65	10.70	n.a.	10.55	11.24	11.24	n.a.
Spain	11.58	12.17	11.77	10.83	10.90	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweden	9.83	10.03	10.21	11.71	11.80	11.90	11.94	11.99	12.10	11.95	13.37
Switzerland	4.96	4.85	5.53	5.64	5.58	5.76	5.83	5.71	5.78	5.63	5.78
Korea	19.60	24.00	32.50	30.50	29.00	28.70	26.00	26.00	23.50	26.30	26.30
Mexico	17.56	20.37	21.99	23.75	24.99	26.26	26.13	26.12	27.55	28.03	28.33
Venezuela	10.39	12.43	14.55	12.81	12.82	12.41	12.40	13.55	14.78	16.15	16.65

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World Financial Markets

Morgan Guaranty Trust Company of New York

March 1981

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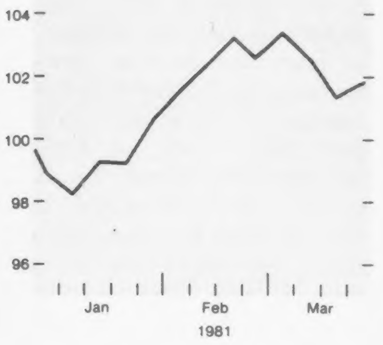
Nominal effective dollar exchange rate
weekly averages
index, March 1973=100



Foreign exchange market developments

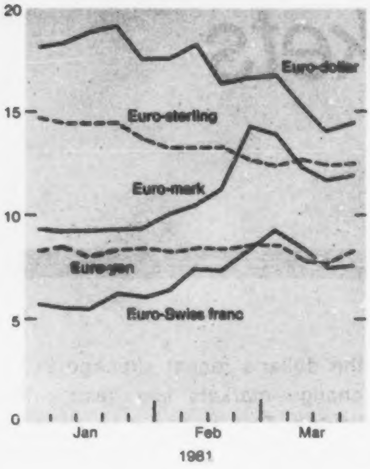
Following several weeks of relative stability, the dollar gave ground against most major currencies in the middle of March. The dollar still stands 2% above its 1980 year-end level on an effective basis, although it has dropped about 2% from its mid-February high. The dollar's decline in mid-March was chiefly in relation to European currencies. It remained fairly steady against the Japanese yen.

The recent downward drift of the dollar has been due to interest rate movements. The Federal funds rate has dropped from 16% in early March to around 13½%. Three-month Euro-dollar rates have fallen by about 3%, to 14½%. With only moderate growth since December in M1B (after adjustments for shifts to interest-bearing NOW accounts), and with M1B well within the Federal Reserve's target band, the recent decline in U.S. money market rates has not been resisted by the Federal Reserve. Although the decline in U.S. rates has now paused, signs of weakening in the domestic economy have reinforced expectations of an eventual further easing of U.S. rates.

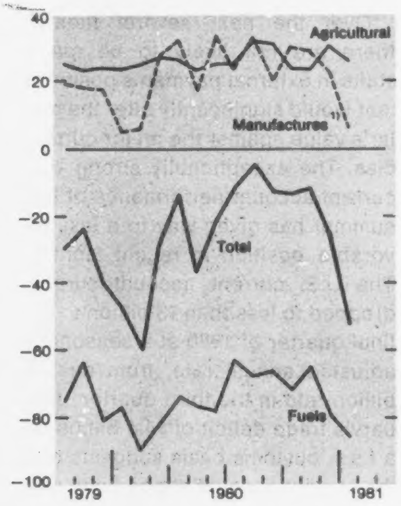
When viewed against the magnitude of this drop in interest rates, the dollar's recent slippage in exchange markets has been rather limited. This is partly because recent declines in U.S. interest rates have to a considerable degree been followed by rate reductions in other countries. Earlier this month, Britain's MLR was reduced by 2% to 12%, and the Bank of Japan cut its discount rate by 1% to 6¼%. Most continental European countries seem eager to lower interest rates as exchange market conditions permit. Some have responded to lower U.S. interest rates and to an easing of the dollar by edging down their domestic rates. If this pattern continues, the dollar is likely to hold on to most of its gains versus European currencies.

Over the next several months there are not likely to be major shifts in external payments positions that would significantly alter the dollar's value against the major currencies. The exceptionally strong U.S. current account performance of last summer has given way to a less favorable position in recent months. The U.S. current account surplus dropped to less than $3 billion in the final quarter of 1980 at a seasonally adjusted annual rate, from an $18 billion rate in the third quarter. January's trade deficit of $4.4 billion on a f.a.s. customs basis suggests that the current account slipped into deficit, but this weakening trend is not

Euro-currency interest rates
3-month deposits, in percent per annum



U.S. trade balance
f.a.s. customs basis, in billions of dollars seasonally adjusted annual rates monthly data



1) Includes re-exports

expected to persist in the near term.

The strong uptrend in U.S. net earnings on services transactions has been at least temporarily interrupted by a leveling off of net direct investment income. However, the overriding reason for the less favorable current account performance in recent months has been a widening of the merchandise trade deficit. An increase in net oil imports around the turn of the year was partly responsible, but this was largely seasonal and will be short-lived. Domestic oil consumption continues to run below year-earlier levels — down an estimated 3½% in January-February 1981 from the same months in 1980 — so that U.S. oil import volume should decline again. Moreover, oil consumption declines worldwide have induced a softening in oil prices. Barring a renewed flare-up of hostilities in the Middle East, OPEC oil prices could remain relatively steady for some time.

The remainder of trade balance deterioration since last fall occurred in manufactures (see chart). Domestic economic recovery pulled in imports, while the slowing in overseas markets held down U.S. exports. Most industrial-country markets are unlikely to revive until much later this year, especially in Europe, to which U.S. shipments have been falling sharply. However, more subdued domestic economic activity in the coming months should trim U.S. import growth. The dollar's appreciation since last fall also will have a favorable terms-of-trade effect on U.S. import costs. Thus, the U.S. trade deficit should narrow again in the next few months, restoring the current account to a surplus position, albeit one modest in relation to last summer's exceptional level.

German monetary policy

The pronounced tightening of German monetary policy in mid-February helped to stabilize the German mark at around the DM 2.10 level against the dollar for several weeks and to put the currency back at the top of the EMS. With the subsequent drop in U.S. interest rates in mid-March, the mark improved briefly to DM 2.05 before falling back to DM 2.09.

The Bundesbank boosted German interest rates last month with the suspension of the fixed-rate 9% Lombard facility and the introduction of a special Lombard facility, whose rate and availability are determined on a day-to-day basis. The rate has been maintained at 12% since the new facility's inception. On two occasions, though, the facility has been temporarily withdrawn, forcing banks to scramble for liquidity and driving up rates for short-term money over 20%. The day-to-day nature of the new facility has introduced an element of uncertainty into markets that has helped the Bundesbank to influence exchange market behavior and stem mark weakness. The Bundesbank also has been maintaining a relatively tight rein on liquidity through currency swaps and other open market operations to prevent money market rates from falling much below the special Lombard rate.

With the mark having stabilized against the dollar and with the need for net intervention to support the mark having passed, the Bundesbank has allowed domestic and Euro-mark interest rates to ease in recent weeks as U.S. and Euro-dollar rates have declined. However, the authorities probably will move cautiously in further lowering rates, given their concern over financing the current account deficit. In January alone, the deficit reached about $30 billion at a seasonally adjusted annual rate. While this may well prove to have been the monthly peak, very large deficits are expect-

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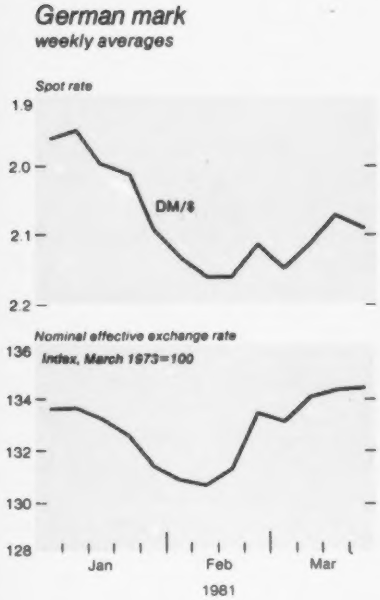
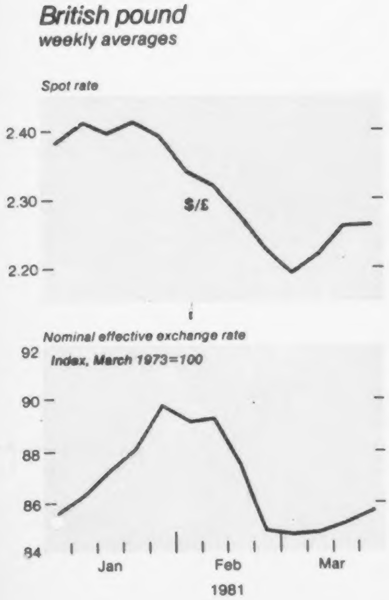

German mark
weekly averages


British pound
weekly averages

ed to persist in the near term. Even though domestic economic activity and import demand are weakening and the volume of foreign orders received by German industry has rebounded from last fall's level, the resulting favorable trend in the real trade balance will be offset for some months by the adverse terms-of-trade effects of prior mark depreciation.

Thus, given the need for large capital inflows, German authorities probably are reluctant to lower interest rates in the absence of substantial reductions elsewhere. The central bank is not likely to be persuaded to ease monetary policy, at least for the time being, despite the severe domestic recession. The Bundesbank argues that a weak mark would mean more inflation and thus higher interest rates in due course anyway. Some pressures for interest rate moderation, however, may come from other EMS participants, now that the mark is back at the top of its band and the Belgian franc is straining at the bottom of its EMS band. Pressures on the Belgian franc led the central bank to boost its discount and Lombard rates by 1% and 2% to 13% and 15%, respectively. The French franc has also slipped within the EMS, although this may reflect pre-election jitters as much as higher German interest rates.

The Italian lira's renewed slide within the EMS, which followed the increase in interest rates in Germany and other EMS countries and the firming of the mark, prompted Italian authorities on March 22 to devalue the lira's central rate by 6% in relation to other EMS currencies and to boost the central bank discount rate to 19% from 16½%. The lira weakened against other EMS currencies following the devaluation, so that it now stands about ½% below the strongest member versus more than 4% below prior to devaluation. With a permitted 6% range of fluctuation within the EMS, the government now has added scope to continue its policy of gradual effective lira depreciation, which is needed in view of Italy's highly adverse inflation differential and its $10 billion current account deficit.

The British budget

Sterling has been relatively stable on an effective basis in the aftermath of the March 10th British budget, although it has appreciated against the dollar from $2.20 to $2.25. The 2% reduction in MLR was widely anticipated and had been preceded by declines in money market rates. The reduction also has been more than matched by the recent decline in U.S. and Euro-dollar rates.

The main thrust of the budget measures was tax increases designed to reduce the public-sector borrowing requirement (PSBR) from an estimated £13½ billion (6% of GDP) in the fiscal year ending this month to £10½ billion (4¼% of GDP) in fiscal 1981-82. By reducing the public-sector deficit the government is aiming to lower interest rates and thus the exchange rate, without compromising efforts to reassert control over money supply growth. The target growth for sterling M3 for the 14 months to April 1982 is an annual rate of 6%-10%. Over the twelve months ended February 1981, sterling M3 rose 20% (16%-17% after adjusting for distortions caused by last year's removal of the "corset"), far above the government's 7%-11% growth target.

In the past, Britain's large public-sector deficit has necessitated high interest rates to maintain monetary control, and these high rates have contributed to boosting the pound to an unsustainably high level. The

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combination of high interest rates and a high exchange rate seriously depressed manufacturing industry profitability, forcing companies to liquidate inventories and to reduce fixed capital investment in order to maintain cash flows and to remain solvent in some cases. These inventory liquidations and, to a much lesser extent, the fixed investment cutbacks have been the principal causes of Britain's sharp recession. Consumer and government spending have not declined at all during the current recession, and export volume only recently turned down. By facilitating a reduction in interest rates and thus the exchange rate, the government hopes to provide some relief from the pressures on company profits, thereby enabling industry to slow inventory liquidation and to step up investment in new plant and equipment.

Sterling, however, is likely to remain fairly steady, if not firm over the near term, notwithstanding the government's preference for a lower exchange rate, unless further interest rate cuts are undertaken. Britain's current account was in surplus at more than a $20 billion annual rate in January-February. Even with an erosion of this exceptionally strong position as a consequence of weaker exports and a gradual pickup of imports, the current account is likely to remain in sizable surplus for several months to come. The government took the precautionary step in the budget message of introducing legislation to broaden its authority to restrict capital inflows, should the need arise. Under existing legislation, there were several loopholes in its powers to limit inflows, especially U.K. residents' borrowing abroad.

The British budget, by tradition, deals chiefly with raising revenues, spending plans having been largely decided and announced earlier. The need to increase taxes substantially to reduce the public-sector deficit was partly the result of continued failure by the Thatcher government to cut expenditure. In this respect, the British budget contrasts sharply with the budget proposed by the Reagan administration as well as with the government's own promises to control public spending and reduce taxes.

Total public-sector spending is expected to rise by 11% in 1981-82 in nominal terms, to 44½% of GDP, compared with 41½% in the last year of the previous Labor Party government. Expenditure will be virtually flat in real terms. In the fiscal year just ending, total spending increased by an estimated 21% in nominal terms and nearly 2% in real terms.

The tax increases contained in the new budget fall heavily on consumers, whose rising real disposable incomes have allowed both higher spending in real terms and an increased rate of savings. Real disposable incomes will now be squeezed by the combination of increases in excise taxes, income taxes (resulting from a suspension of inflation-indexation of allowances), and national insurance contributions (announced last November to take effect April 1).

The deflationary impact of these tax increases on consumption will tend to delay and dampen recovery from the current recession. This deflationary impact could be offset to some extent by changes in industry's inventory policies and fixed capital investment plans. Such changes can be expected to follow improvement in companies' financial positions resulting from reductions in interest rates and, at some stage, the exchange rate. A slowing of inventory liqiudation would trigger a recovery in output. As this process occurs, import demand is likely to strengthen, causing a deterioration in Britain's current account, thereby contributing to exchange rate weakness.

Meanwhile, unemployment is widely expected to rise above 3 million (more than 12% of the labor force) before the year is out. This could pose difficulties for the government when it confronts the task of making the sizable spending cuts necessary to implement its medium-term strategy, which calls for a 4% reduction in public expenditure in real terms by 1983-84. Failure to push through spending cuts would be fatal in the long run to the Thatcher government's strategy for reducing inflation and redressing the balance between the public and private sectors.

Japanese exchange-control liberalization and the yen

Over the last few years Japanese authorities have gradually liberalized Japan's exchange control structure, easing both resident access to foreign financial markets and nonresident access to domestic financial markets. This liberalizing trend culminated recently with passage of the New Foreign Exchange and Foreign Trade Control Law that became effective December 1, 1980. It replaced former laws under which all foreign exchange transactions and foreign direct investments in Japan were prohibited, except those specifically authorized by individual cabinet orders or ministerial ordinances. Foreign exchange transactions and foreign direct investment are now free in principle, unless specified otherwise.

The new law, however, contains a safeguard clause that provides for the enforcement of an overall licensing system of capital transactions in the event that: 1. the balance of payments is deteriorating; 2. there are large fluctuations of the yen or other currencies; or 3. large transfers of funds between Japan and foreign countries adversely affect domestic money or capital markets. In addition, Japanese authorities have retained an elaborate system for monitoring capital flows into and out of Japan. The actual extent of liberalization that is provided under the new law, therefore, is still subject to considerable administrative guidance. Moreover, there remain areas such as commercial bank foreign-currency swaps and issuance of securities by nonresidents in the Japanese market ("Samurai bonds") that are still subject to restrictions.

The 1980 law mainly affects four types of international transactions that had not been fully liberalized previously. Japanese residents now have unlimited freedom to exchange yen into foreign currencies for deposit, whereas a Y3 million limit had been in effect previously. Japanese banks are now permitted to borrow and lend foreign currencies at home and abroad without restrictions, at least in principle. This includes "impact loans" (foreign currency loans for use in Japan) that formerly had largely been the preserve of foreign banks in Japan. Japanese companies have also been given greater freedom to borrow abroad. In addition, the scope for foreign investments in Japanese securities has been widened, especially in the area of equities. The former general limitation of 25% foreign ownership has been lifted. Limits of 25% foreign ownership, however, have been retained for a select number of companies and additions to this list may be made in the future.

Implementation of the new law was followed initially by a large volume of newly liberalized transactions. For example, residents' holdings of foreign currency deposits jumped $1.4 billion in December, or by almost 60% to $3.7 billion. This

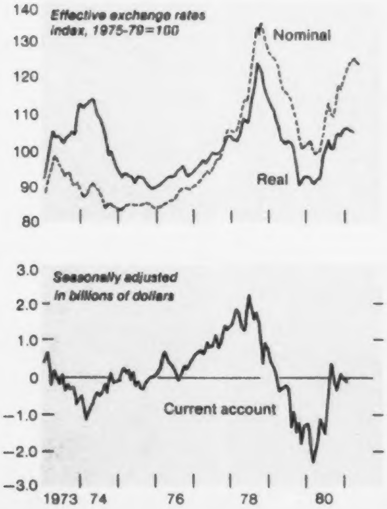
Table 1

Japanese growth rate differential
in percent per annum

Year	*Japanese real GNP growth*	*Foreign real GNP growth*[1]	*Differential*
1977	5.3	5.0	0.3
1978	5.1	4.2	0.9
1979	5.6	2.8	2.7
1980	4.2	2.6	1.5
1981 proj.	3.8	2.7	1.1

[1] weighted by Japanese export shares

Japanese yen and current account
monthly data



rise, however, was accompanied by a $1.5 billion increase in impact loans. As a consequence, the initial effect of the new law on the yen was largely neutral.

Over the longer run, liberalization of Japanese exchange controls could have important implications for yen exchange-rate volatility, exchange-rate management, domestic monetary policy, and the internationalization of the yen.

Yen volatility

Since generalized floating exchange rates in 1973, the value of the yen has fluctuated widely. Yen volatility has been especially large over the last four years, during which three distinct phases of yen movement can be identified: 1. January 1977 to October 1978, in which the yen appreciated by almost 50% on an effective basis; 2. November 1978 to March 1980, in which it fell by 25%; and 3. April 1980 to the present, in which it has appreciated by nearly 25% (see chart).

During each of these periods, movements in the trade-weighted value of the yen far exceeded inflation rate differentials, resulting in sharp swings in the real effective exchange rate as well. The fluctuations in the real effective exchange rate from its longer-run average have not been as large or as sustained as those for sterling, but they have been much larger than those for the dollar and the EMS currencies. This may be partly explained by the high degree of economic interdependence between the United States and Canada and the close integration among the EMS countries, but there are other important considerations.

A commonly held view is that the large swings in the nominal and real effective indices for the yen are the result of momentum or bandwagon effects. According to this view, exchange market participants (e.g., Japanese trading companies) form a consensus about the future value of the yen based in part on trends in export and import settlements. Consequent capital flows, including leading and lagging of trade payments, result in overshooting. Some observers contend that liberalization of exchange controls will exacerbate this tendency by making it easier for investors to shift into or out of the yen.

The accompanying charts show, however, that there is a very close relation between fluctuations in the effective value of the yen on both a nominal and a real basis and changes in Japan's current account balance, with current account turning points preceding those for the yen by a few months. The period of rapid yen appreciation in 1977-78 coincided with a record Japanese current account surplus (and a record U.S. deficit), while the yen's depreciation in 1979 and early 1980 occurred while Japan's current account was headed toward a record deficit (and while the U.S. current account was moving toward balance). The most recent period of yen appreciation, moreover, has coincided with a steady reduction in Japan's current account deficit. In this sense, movements in the yen clearly have reflected underlying balance-of-payments trends.

The large swings in Japan's current account balance, in turn, can be traced to both cyclical and structural factors. The influence of cyclical factors is indicated in Table 1. While Japan has maintained a positive growth-rate differential of nearly one and a half percentage points on average over the last four years, it has fluctuated considerably from year to year, largely as a consequence of business cycles in Japan lagging those in the United States. The more rapid U.S. recovery from

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Table 2

Commodity composition of trade in 1979

as percent of total imports or exports

	Imports		
	Agriculture & raw materials	Fuels	Manu-factures
Japan	33	41	26
Italy	27	24	49
United States	14	29	57
Germany	20	20	60
France	18	22	60
United Kingdom	22	11	67
Canada	12	9	79

	Exports	
	Non-manu-factures	Manu-factures
Japan	3	97
Germany	11	89
Italy	14	86
United Kingdom	20	80
France	22	78
United States	30	70
Canada	45	55

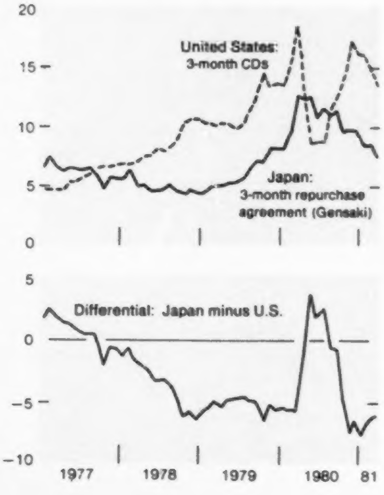
the 1974-75 recession helped to narrow the differential to about one-half percentage point in 1977-78, and in the process contributed to the large payments imbalances of the two countries. The swing of Japan's current account into deficit in 1979 and early 1980, on the other hand, can be traced in part to the pickup of Japanese domestic demand at a time when the U.S. economy was weakening.

The influence of these cyclical factors, in turn, has been magnified by the tendency of Japanese industry to push exports hard when domestic demand slackens (or to emphasize the domestic market in periods of strong internal demand). During the past year, for example, a relatively high overall GNP growth rate was maintained, despite very weak growth in domestic demand, because of a strong export performance. This tendency is partly related to the high proportion of fixed costs in much of Japanese industry, which puts a premium on maintaining high operating levels.

Cyclical factors have been reinforced at times by certain structural factors — in particular, Japan's very large reliance on exports of manufactures (97% of total exports) and its heavy dependence on imports of raw materials, agricultural products, and fuels. These latter items together account for nearly 75% of Japan's imports — the highest percentage for the major industrial countries (see Table 2). In 1980, oil alone accounted for 40% of Japan's imports. Given this trade structure, movements of prices of internationally traded commodities (especially oil) relative to those of manufactures have had a very large impact on Japan's terms of trade. For example, between November 1978 and March 1980, the prices of oil and non-oil commodities in dollar terms increased by 130% and 27% respectively, far outstripping the rise of Japanese manufactures prices. The result was a nearly 40% decrease in Japan's terms of trade. The stabilizing of international commodity prices since last March and the softening of oil prices after last fall have led to a recent improvement in Japan's terms of trade, reinforcing the effect of weak domestic activity on slowing import growth and improving the trade balance.

In view of the swings of growth-rate differentials and terms of trade in the past few years, large exchange rate changes have been required to promote balance-of-payments adjustment. This was especially true after the second oil shock, when a fundamental strengthening of Japan's international competitive position was needed to overcome both rising import bills for fuel and raw materials and sluggish growth in overseas markets. Even though large global payments imbalances persist, as evidenced by an OPEC surplus of more than $100 billion this year, Japan's current account has moved into virtual balance in recent months. Japan's international price competitiveness, however, has diminished — the yen's real effective exchange rate currently stands about 6% above its average value of 1975-79 — and this is expected to contribute to a slowing of Japan's export growth in the months ahead. Japan, nevertheless, is likely to record only a small current account deficit for the year, because the weak domestic economy and relatively stable commodity prices should keep imports depressed for a while longer. With the U.S. current account anticipated to be in small surplus for this year, an important cause of yen volatility — namely, widely divergent current account patterns for Japan and the United States — should be considerably diminished this year.

Another source of exchange rate volatility has been swings in capital



Japan – U.S. interest rates
month–end data
in percent per annum

movements. Fluctuations in Japanese capital flows have grown considerably in recent years as a consequence of several developments: 1. large movements in interest-rate differentials between Japan and the United States; 2. pent-up foreign demand for yen-denominated assets, especially on the part of OPEC investors; and 3. the gradual liberalization of exchange controls.

The accompanying chart shows the movement of the short-term interest-rate differential between Japan and the United States since 1977 and highlights the large changes that have occurred recently. This phenomenon partly reflects increased fluctuations of U.S. interest rates arising from the change in the Federal Reserve's operating procedures for controlling the money supply, as well as the relatively greater rigidity of Japanese interest rates. U.S. interest rate movements, in particular, were a key factor behind the large swings in Japanese capital flows last year. The sharp decline in U.S. interest rates last spring and early summer, for example, helped to boost net capital flows (including banking flows and errors and omissions) into Japan to nearly $11 billion between end-March and end-August. Net capital inflows slackened considerably in the closing months of the year, however, as U.S. interest rates surged again.

Japanese capital movements have also been influenced by a steady buildup of foreign demand for yen-denominated assets over the past few years. This development is a consequence of the yen's appreciation through most of the 1970s and a desire on the part of foreign investors (especially OPEC) to increase the share of yen-denominated assets in their portfolios from a very low base. The amount of inflows has fluctuated considerably from month to month, reflecting changes in both interest rates and exchange-rate expectations. On balance, the ongoing diversification into yen assets helped to moderate pressures on the yen arising from Japan's large current account deficit last year, as well as contributing to the yen's sharp rebound since last spring.

In short, capital movements at times have amplified the large swings in the yen. In most instances, though, these movements have been in response to changes in interest-rate differentials.

Exchange rate management and monetary policy

In the past, the Japanese authorities relied extensively on exchange-market intervention and capital controls to moderate fluctuations in the yen, while attempting to insulate domestic financial markets from interest-rate developments overseas. Several factors, however, have served to reduce the traditional reliance on intervention and capital controls as instruments of exchange-rate management.

Exchange controls have yielded only mixed results in stabilizing the yen or insulating domestic financial markets. The imposition of controls on capital inflows (and encouragement of outflows) in periods of yen strength and controls on outflows (and encouragement of inflows) during periods of yen weakness proved to be very cumbersome and difficult to alter quickly in response to changing market forces. While capital controls were successful in limiting specific types of transactions, they proved less effective in dealing with other types of capital movements — e.g., leading and lagging of export and import settlements and switching of trade financing from yen to foreign currencies, or vice versa — and in stemming the pent-up foreign demand for yen as-

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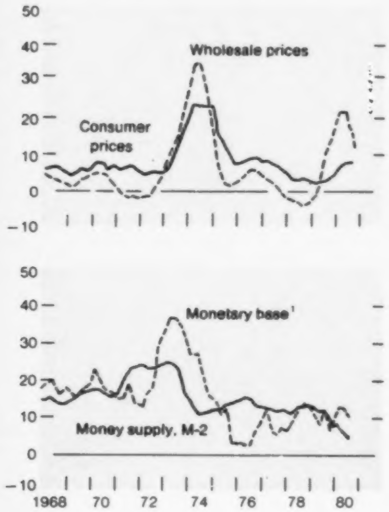
Japanese inflation and monetary growth

percent change from same period of preceding year, quarterly data



[1] Currency issue plus deposits of banks at Bank of Japan

sets. Moreover, by limiting the amount of two-way capital flows, they contributed at times to thin markets. In this regard, the liberalization of exchange controls should have a stabilizing effect by deepening the market for the yen, thereby lessening the chances of sharp exchange-rate fluctuations arising because of thin markets. At the same time, however, it will also heighten the sensitivity of capital flows to changes in interest-rate differentials and exchange-rate expectations.

There has also been a growing recognition on the part of the Japanese authorities that heavy official intervention has not been effective in containing exchange-rate pressures, particularly in the face of fundamental market forces. At times heavy intervention has turned out to be counterproductive, triggering even larger private capital flows, as exchange-market participants viewed the magnitude of intervention as evidence of the strength of market forces. Moreover, in situations in which intervention succeeded temporarily in preventing exchange-rate movements, such as the efforts to forestall the yen's appreciation in 1977, the effect was to postpone balance-of-payments adjustment. This resulted in even larger payments imbalances, and eventually larger exchange rate changes. In this sense, heavy official intervention itself contributed to some of the wide fluctuations in the yen.

The reduced reliance on large-scale exchange-market intervention has also been influenced by domestic monetary policy considerations, together with the gradual liberalization of exchange controls. Following the 1973-74 bout of rampant domestic inflation (which reached a peak of 24% and 35% as measured by consumer and wholesale prices, respectively) the Japanese authorities made inflation control the top priority objective of economic policy and money-supply control a principal instrument for attaining this objective. They began to set internal money-supply targets, and since July 1978 they have published quarterly projections of money-supply growth. As shown in the accompanying charts, the authorities have achieved considerable success in controlling money supply growth and inflation in recent years.

As long as exchange controls constrained capital flows, the Japanese authorities were able to offset much of the effect of exchange-rate intervention on the monetary base. In 1977-78, for example, much of the impact on the monetary base of the increase in official foreign exchange reserves acquired in supporting the dollar was offset through open-market sales of securities. While there was an acceleration of base-money expansion from a very low rate in 1976, the pace remained well below that during the first half of the 1970s and was compatible with controlling money-supply growth (see chart).

With the liberalization of exchange controls and the increased sensitivity of capital flows to interest rates, however, the ability of the authorities to control the money supply in periods of heavy exchange-market intervention will be diminished in the future. It will become more difficult to intervene successfully and at the same time offset the effects of exchange-market intervention on the monetary base. For example, if the authorities attempted to offset sustained increases in foreign exchange reserves through domestic open-market sales of securities, the latter would tend to raise domestic interest rates, attracting additional capital inflows. This would place additional pressure on the exchange rate, frustrating the objective of the initial intervention. Partly for this reason, the Japanese authorities have been intervening recently mainly to smooth fluctuations in the

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yen and to rebuild foreign exchange reserves from a low base, rather than to resist fundamental market forces over prolonged periods.

With less reliance on large-scale official intervention and exchange controls, the authorities will need to rely on a greater degree of domestic interest-rate flexibility in managing the exchange rate in the future. In this regard, the recent announcement of plans by the Bank of Japan to establish a new Lombard-type system under which it will lend money to commercial banks on a selective basis at an interest rate higher than the discount rate could mark a new direction in Japanese management of the exchange rate. The system is intended as a contingency plan that would be activated in the event there were substantial capital outflows arising because of interest rate increases abroad and, in this respect, is similar to actions taken by the German authorities last month to defend the mark. Presumably, the concept could be generalized to cover situations in which there are sharp reductions in foreign interest rates as well.

In addition to external considerations, there are several domestic reasons to expect the continuation of the recent trend toward gradual interest rate liberalization and the associated diversification of financial instruments (e.g., gensaki repurchase agreements, medium-term government bonds, and negotiable CDs). The overall compelling factor is a recognition of the need for greater interest rate flexibility to ensure more efficient allocation of savings among competing uses and to enhance the efficacy of monetary policy. The fundamental restructuring in the flow of funds that has taken place since the end of the double-digit growth era, with the public sector emerging as the dominant absorber of household savings, has complicated monetary control, which relied mainly on the discount mechanism and window guidance. The large central government financing requirement entailed by a $65 billion budget deficit in 1980 (5½% of GNP) has brought into sharp focus the inherent conflict between the traditional debt management concern for minimizing borrowing costs and the goal of money supply control. Given the institutional arrangement prevailing in Japan whereby commercial banks serve as captive initial subscribers to some two-thirds of government bonds at issue, the issuance of massive government debt at below the market yields has seriously eroded the profitability of banks.These conflicts have been partially resolved by introducing bonds with shorter maturities sold through public offering, and by promoting the development of secondary markets in government bonds, which should facilitate open-market operations. In view of the prospect for continued high fiscal deficits in the near term, continued efforts to improve the markets for government bonds appear both warranted and likely.

Internationalization of the yen

The liberalization process will gradually enhance the use of the yen as an international currency. Until a few years ago, the Japanese authorities openly discouraged the use of the yen as a reserve currency, on the grounds that it would exacerbate yen volatility and complicate control of the domestic money supply. Official resistance, however, has given way to acceptance of an orderly evolution of the yen as an international currency. This shift in official sentiment is a response to several underlying market forces, namely: the rapid increase in foreign demand for yen-denominated assets since the mid-1970s; the opening of the domestic money and capital markets to nonresidents; and, perhaps most significantly, the large Japanese balance-of-payments financing requirements following the second oil shock.

These developments have resulted in an expanded role of the yen as a vehicle currency, albeit one that is still relatively small in relation to most other major industrial countries. The proportion of Japanese exports denominated in yen has increased from only 2% in the early 1970s to over 25% today. This compares with a range of between 60% and 85% for the major European countries and close to 100% for the United States. The percentage of Japanese imports invoiced in yen, moreover, has remained virtually unchanged throughout the past decade at only 3%. The role of the yen in international financial transactions has grown with the access, albeit still limited, of foreign borrowers to the domestic market and the development of the Euro-yen market, which is estimated to have reached $12-$13 billion at the end of 1980. The pending decision of the Ministry of Finance to allow Japanese banks to make short-term Euro-yen loans in the future could enhance it further.

The trend toward liberalization of exchange controls could result in a more expanded role of the yen as a vehicle currency insofar as it deepens the market for the yen, provides increased access to yen financing, and promotes diversification of domestic financial instruments. One obstacle, however, continues to be the lack of a domestic market for bankers' acceptances to provide trade financing, although this may be partly alleviated if Japanese banks are given the green light on short-term Euro-yen lending.

Exchange-control liberalization is likely to have an even greater impact on enhancing the role of the yen as an investment currency and a reserve currency. Over the past five years nonresident holdings of yen financial assets, including Euro-yen deposits, are estimated to have risen by more than $35 billion. Over half of the increase was in bank deposits, much of which reflects deposits of monetary authorities of nonindustrial countries, while the remainder was mainly in stocks and bonds. Last year alone, there was an $11 billion net increase in nonresident holdings of Japanese securities, the vast majority of which was undertaken by OPEC investors and institutional investors in the United States and Europe. This reflected renewed investor confidence in the Japanese economy and the yen stemming from Japan's rapid adjustment to the second oil shock.

The new foreign-exchange law should provide even further impetus to foreign purchases of Japanese equities and bonds. Its impact on foreign central bank holdings of yen deposits, however, may be less evident since the latter had been liberalized earlier. The yen's role as an international reserve currency is likely to continue to grow gradually — yen assets now constitute about 4% of total official holdings for foreign exchange and 9% of official holdings of non-Group of Ten countries — not only as a consequence of recent steps toward exchange-control liberalization but the trend toward domestic money-market liberalization, as well. The increased marketability of domestic instruments, which should accompany greater interest-rate flexibility, will enhance the attractiveness of yen securities as reserve assets. In this respect, the process of liberalization in Japan is conducive to the orderly evolution of a multiple-currency reserve system.

Statistical appendix

for key to data in tables see January 1981 issue.

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Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

Effective exchange rates

Index numbers, March 1973=100. The index of the effective exchange rate for a currency is a measure of that currency's trade-weighted average appreciation or depreciation vis-à-vis the currencies of 15 other major countries. The exchange rates used in the construction of this index are the averages of daily noon spot exchange rates in New York for months and for weeks ending on dates shown. The trade weights used are based on 1976 bilateral trade in manufactures.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
pre-June 1970 parities	118.5	94.9	79.3	116.2	91.6	97.5	110.9	95.9	98.2	88.3	97.8	97.9	98.1	102.2	92.2	98.4
Smithsonian central rates	107.0	101.3	88.7	116.0	95.4	96.1	108.3	97.0	99.1	91.6	98.0	96.0	96.3	100.5	91.7	98.1
1980																
March	101.3	84.3	101.9	77.4	137.8	90.2	53.9	109.6	118.7	159.1	121.4	91.7	104.2	88.2	75.1	75.5
April	102.3	83.4	101.6	78.2	137.1	90.3	53.4	109.9	118.1	161.1	121.0	91.2	104.6	88.4	75.5	73.3
May	98.4	83.6	109.4	78.6	138.1	90.3	53.3	110.6	118.2	163.7	121.4	91.5	103.5	88.1	74.8	71.5
June	96.2	84.9	113.8	78.7	137.9	90.6	53.1	110.8	118.6	164.3	121.7	92.0	103.0	87.8	74.8	71.4
July	96.0	84.8	111.7	79.3	138.2	91.1	52.7	110.9	119.1	165.5	122.2	92.5	102.8	87.8	75.1	70.0
August	97.2	84.5	111.1	80.5	137.2	90.7	52.7	110.2	119.0	163.8	122.0	91.8	103.3	88.2	75.7	69.6
September	96.4	83.9	115.8	81.4	137.0	90.4	52.4	109.9	119.1	164.7	121.8	91.4	103.3	88.2	75.4	68.4
October	96.8	83.6	119.4	83.2	135.4	89.9	52.0	109.1	118.3	165.5	121.0	90.5	103.2	88.7	75.4	68.3
November	98.9	82.7	118.8	84.9	134.3	89.0	51.7	108.3	117.7	164.5	119.9	89.5	103.6	89.0	76.1	68.6
December	99.9	82.2	122.0	84.8	133.9	88.7	51.4	107.8	117.0	162.5	119.8	89.4	102.6	88.9	76.6	67.5
1981																
January	99.4	82.5	126.7	87.8	132.8	88.3	51.0	107.2	116.2	160.9	119.4	88.0	101.7	88.8	76.6	66.3
February	102.3	82.5	127.3	87.7	131.7	87.1	50.3	106.3	115.0	159.1	118.8	86.4	103.1	90.2	77.4	65.9
6	101.6	82.5	128.4	89.1	130.9	87.5	50.4	106.5	115.2	158.8	118.6	86.5	102.4	90.1	76.9	66.8
13	102.3	82.5	128.2	89.2	130.7	87.2	50.5	106.3	114.6	158.1	118.5	86.4	103.0	90.4	77.2	66.0
20	102.7	82.4	127.0	87.5	131.2	86.9	50.3	106.6	115.2	159.2	119.0	86.6	104.0	90.7	77.5	65.2
27	102.6	82.6	126.0	84.9	133.5	87.0	50.5	106.1	114.8	159.6	119.7	86.7	103.7	90.2	77.8	65.5
March 6	103.5	82.5	126.0	84.7	133.0	86.7	50.8	105.8	114.6	159.3	119.7	86.0	103.8	90.4	78.0	65.3
13	102.6	82.7	126.6	84.8	134.0	86.9	50.1	105.8	114.6	160.0	119.8	86.0	103.8	89.9	77.8	65.7
20	101.5	83.4	125.3	85.1	134.3	87.2	49.9	106.3	114.9	161.3	120.2	86.4	103.6	90.0	77.9	66.2

Real effective exchange rates

Index numbers, March 1973=100. The index of the real effective exchange rate is the index of the effective exchange rate adjusted for inflation differentials which are measured by wholesale prices of nonfood manufactures. Exchange rates and trade weights used in the construction of this index are the same as those used for effective exchange rate indices. Annual figures are averages of months.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
1977	100.1	99.8	93.7	101.7	102.7	96.6	92.4	100.0	104.0	105.7	109.6	97.5	99.8	105.2	92.0	101.4
1978	95.4	92.9	107.5	106.5	103.4	97.3	90.9	99.9	103.9	122.4	109.7	103.7	95.6	96.7	87.3	97.3
1979	95.6	92.9	96.2	118.9	104.2	99.2	90.7	97.3	100.5	115.7	108.5	101.8	90.5	99.4	86.1	109.4
1980	97.8	91.6	93.9	137.1	101.2	101.0	92.0	92.2	97.9	105.5	108.7	93.7	91.7	101.3	87.9	106.9
1980																
March	99.9	92.4	86.6	133.1	101.9	100.5	92.6	93.1	98.3	104.1	109.5	94.3	93.2	101.5	87.6	111.6
April	101.5	90.7	87.2	134.5	101.6	100.5	92.1	93.1	97.3	105.0	108.3	93.6	93.3	100.9	87.2	107.5
May	97.5	90.7	94.2	136.0	102.0	100.4	92.5	93.5	97.3	106.3	109.3	94.2	92.8	100.5	86.2	105.0
June	95.4	92.2	98.0	137.4	101.8	100.4	92.9	93.3	97.2	106.0	109.7	94.3	91.7	100.4	86.0	105.9
July	95.7	91.9	95.2	138.5	101.5	101.3	92.8	92.9	97.7	106.1	110.4	96.0	92.0	100.1	86.9	104.4
August	96.8	91.6	94.8	140.7	100.5	102.3	92.8	91.6	97.2	104.3	109.9	95.7	91.8	100.7	88.3	104.3
September	95.4	91.6	98.7	142.3	100.0	102.3	93.2	91.9	96.8	104.6	109.5	94.1	92.6	101.0	88.3	103.2
October	97.1	90.8	99.7	144.7	98.9	101.9	92.6	91.5	95.5	104.6	108.3	93.9	93.1	101.1	88.1	102.9
November	98.7	90.4	98.5	147.0	98.1	100.7	92.8	92.1	94.2	104.4	106.9	92.7	93.7	101.4	89.2	103.6
December	100.1	89.5	100.2	146.4	97.7	100.6	93.1	91.5	93.4	103.0	107.3	92.8	92.9	101.3	90.4	102.5
1981																
January	99.7	90.0	102.7	152.0	97.7	99.8	91.9	92.3	91.3	101.7	107.1	91.0	92.2	100.5	90.4	101.1
February	103.3	89.8	102.1	152.2	96.4	98.5	91.4	91.9	89.9	100.9	105.8	89.3	93.8	102.0	91.5	100.2

Euro-currency market size

based on foreign-currency liabilities and claims of banks in major European countries, the Bahamas, Bahrain, Cayman Islands, Panama, Canada, Japan, Hong Kong, and Singapore
billions of dollars (rounded to nearest $5 billion), at end of period

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	
										Jun	Sep[r]
Estimated size											
Gross	150	205	310	390	480	590	725	925	1 185	1 310	1 365
Liabilities to nonbanks	30	35	55	75	80	100	125	170	230	265	275
Liabilities to central banks	15	25	40	60	70	85	110	120	155	160	170
Liabilities to other banks[a]	105	145	215	255	330	405	490	635	800	885	920
Net	85	110	160	215	250	310	380	485	600	670	705
Claims on nonbanks	35	45	65	100	115	150	195	245	295	340	355
Claims on central banks and on banks outside market area[b]	35	45	75	95	115	135	155	195	245	260	275
Conversions of Euro funds into domestic currencies by banks in market area[c]	15	20	20	20	20	25	30	45	60	70	75
Euro-dollars as % of gross liabilities in all Euro-currencies	76	78	73	77	78	79	76	74	72	72	73

a Includes unallocated liabilities
b Includes unallocated claims
c In European market area only
r revised
p preliminary

Euro-currency deposit rates

prime banks' bid rates in London, at or near end of month

	1977	1978	1979	1980						1981	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Euro-dollar:											
overnight	7.12	10.62	14.00	9.12	10.50	12.50	13.25	18.50	19.25	17.50	15.75
7-day fixed	6.31	10.62	14.00	9.25	10.62	12.50	13.50	18.50	19.75	17.50	15.50
one month	6.87	11.00	14.37	9.50	11.19	13.19	14.50	18.37	19.12	17.68	16.81
three months	7.19	11.69	14.44	9.81	12.25	13.81	15.37	18.06	17.62	17.50	16.62
six months	7.50	12.31	14.44	10.06	12.50	13.94	14.87	16.87	16.75	16.75	16.75
twelve months	7.67	12.00	12.87	10.19	12.50	13.69	14.12	15.50	14.87	15.75	16.06
Euro-mark:											
one month	2.19	3.19	8.50	8.69	8.62	8.87	8.81	9.69	8.87	9.31	14.87
three months	2.50	3.31	8.56	8.25	8.50	8.87	8.94	9.56	8.87	9.37	14.25
six months	2.81	3.69	8.56	7.81	8.31	8.87	8.81	9.31	8.87	9.37	13.37
twelve months	3.06	3.81	8.12	7.75	8.12	8.69	8.56	9.37	8.93	9.31	12.75
Euro-Swiss franc:											
one month	1.31	—.06	5.19	5.06	6.00	5.25	4.12	6.12	6.00	5.50	8.37
three months	1.37	0.00	5.75	5.12	5.87	5.75	5.44	6.12	6.00	6.00	8.37
six months	1.87	0.12	5.87	5.25	5.75	5.75	5.12	6.12	5.75	6.00	8.37
twelve months	2.25	0.62	5.56	5.00	5.50	5.62	5.37	6.19	5.50	6.12	7.62
Euro-sterling:											
one month	6.50	12.00	16.75	16.87	16.75	16.25	17.00	14.50	14.75	14.25	13.75
three months	6.62	12.62	16.75	15.62	16.62	15.87	16.75	14.62	14.75	13.75	12.75
six months	7.12	13.25	16.75	14.25	16.25	15.00	16.12	14.44	14.25	13.12	12.12
twelve months	7.37	13.00	15.25	13.25	15.12	14.37	15.00	14.00	14.00	13.12	12.00
Euro-French franc:											
one month	12.25	10.50	13.87	12.37	12.00	11.62	11.00	10.50	11.12	10.37	11.75
three months	13.25	9.87	14.00	12.12	12.12	12.06	11.31	11.37	11.75	10.87	12.87
six months	14.00	9.87	14.12	12.00	12.37	12.56	12.00	12.37	12.25	11.87	13.00
twelve months	13.25	10.25	13.75	11.94	12.62	12.81	12.62	13.00	12.87	12.62	13.00
Euro-yen:											
one month	0.62	—.69	7.62	12.87	11.62	12.50	10.00	10.25	9.12	8.25	8.62
three months	1.81	0.62	8.31	12.25	11.62	12.25	9.62	10.12	9.25	8.50	8.62
six months	2.75	1.87	8.62	11.37	11.12	11.50	9.12	10.12	9.62	8.50	8.37
twelve months	3.25	2.19	7.94	9.75	9.75	10.50	9.00	9.37	9.37	8.50	8.37

Euro-currency bank credits

publicly-announced in period, in millions of dollars

	1978	*1979*	*1980*	*1981*			*Jan-Mar*	
				Jan	*Febr*	*Marp*	*1981*	*1980*
Industrial countries	**28 952**	**27 248**	**39 650**	**5 312**	**2 198**	**788**	**8 298**	**4 963**
Australia	212	941	2 475	91	—	125	216	312
Canada	5 705	1 845	1 743	—	240	—	240	50
Denmark	2 242	1 205	1 720	200	—	49	249	381
Finland	550	92	1 040	65	175	—	240	150
France	1 914	2 955	1 745	375	1 045	—	1 420	107
Greece	508	1 009	1 333	200	—	—	200	63
Ireland	616	687	237	24	—	—	24	—
Italy	2 485	3 708	6 468	1 505	280	70	1 855	838
Norway	1 517	935	685	10	37	—	47	151
Spain	2 426	4 184	5 457	604	220	284	1 108	1 000
Sweden	1 872	1 263	1 720	1 430	—	—	1 430	233
United Kingdom	3 898	795	1 470	—	—	—	—	373
United States	1 206	2 348	6 719	350	175	100	625	525
Othera	3 801	5 281	6 838	458	26	160	356	780
Developing countries	**37 290**	**47 964**	**35 034**	**3 099**	**4 141**	**1 375**	**8 615**	**5 874**
Non-OPEC countries	26 669	35 225	23 535	2 447	3 062	1 182	6 691	3 427
Argentina	1 461	2 965	2 506	250	265	107	622	330
Brazil	5 634	6 278	4 158	297	320	365	982	289
Chile	1 045	867	1 322	195	245	20	460	90
Korea	2 651	3 258	1 917	128	267	—	395	858
Malaysia	858	1 168	—	45	400	—	445	—
Mexico	7 250	8 243	5 971	730	725	13	1 468	500
Morocco	605	499	420	140	—	—	140	—
Peru	—	596	480	—	100	200	300	145
Philippines	2 073	2 067	1 056	77	25	78	180	324
Taiwan	254	1 063	314	—	300	175	475	—
Otherb	4 838	8 221	5 391	585	415	224	1 224	891
OPEC countries	10 621	12 739	11 499	652	1 079	193	1 924	2 447
Algeria	2 576	1 906	40	—	—	—	—	—
Indonesia	1 118	1 061	1 435	3	—	—	3	784
Nigeria	825	1 373	1 330	75	319	100	494	258
United Arab Emirates	726	401	101	—	—	—	—	58
Venezuela	2 054	6 830	6 715	510	580	58	1 148	783
Other	3 322	1 168	1 878	64	180	35	279	564
Communist countries	**3 767**	**7 325**	**2 809**	**250**	**280**	**400**	**930**	**480**
China	—	3 395	181	—	—	—	—	—
East Germany	642	796	303	250	—	—	250	—
Hungary	700	260	550	—	150	400	550	249
Poland	374	849	800	—	—	—	—	29
Otherc	2 051	2 025	975	—	130	—	130	202
International organizations	**160**	**275**	**429**	—	**50**	—	**50**	**249**
TOTAL	**70 169**	**82 812**	**77 922**	**8 661**	**6 669**	**2 563**	**17 893**	**11 566**

a Includes multi-national organizations b Includes regional development organizations c Includes COMECON institutions p preliminary
r revised

International bond yields

long-term issues, at or near end of month

	1977	*1978*	*1979*	*1980*						*1981*	
	Dec	*Dec*	*Dec*	*Jul*	*Aug*	*Sep*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*
U.S. companies:											
U.S. dollar	7.95	8.55	10.13	9.99	10.60	10.73	11.27	11.46	11.76	11.94	12.17
Swiss franc	5.31	5.70	6.61	7.28	7.30	7.28	7.26	7.38	7.27	7.44	7.26
European companies:											
U.S. dollar	8.42	9.21	10.93	10.72	11.47	11.71	12.04	12.38	12.42	12.53	13.06
German mark	6.80	6.84	7.55	7.63	7.85	8.31	8.66	8.72	8.79	8.85	9.58
Governments:											
U.S. dollar	8.42	9.12	10.66	10.50	10.90	11.08	11.22	11.27	11.83	11.93	12.37

New international bond issues

new issues in period, in millions of dollars

	1978	*1979*	*1980*	*1981*			*Jan-Mar*	
				Jan	*Feb*^{r}	*Mar*^{p}	*1981*	*1980*
By type:								
Euro-bonds, total	**14 125**	**18 726**	**23 959**	**2 759**	**1 406**	**1 661**	**5 826**	**3 343**
by category of borrower								
U.S. companies	1 122	2 872	4 100	415	552	125	1 092	359
Foreign companies	4 540	7 183	9 032	772	350	719	1 841	1 170
State enterprises	3 291	4 524	5 835	797	407	567	1 771	1 057
Governments	3 643	2 433	3 045	610	—	50	660	682
International organizations	1 529	1 714	1 947	165	97	200	462	75
by currency of denomination								
U.S. dollar	7 290	12 565	16 420	2 400	1 149	1 215	4 764	1 927
German mark	5 251	3 626	3 607	—	—	—	—	960
Dutch guilder	394	531	1 050	49	75	44	168	111
Canadian dollar	—	425	279	—	—	—	—	—
European unit of account	165	253	65	32	—	—	32	25
Other	1 025	1 326	2 538	278	182	402	862	320
Foreign bonds outside the United States, total	**14 359**	**17 749**	**14 521**	**1 125**	**886**	**1 129**	**3 140**	**3 736**
by category of borrower								
U.S. companies	245	217	307	10	118	93	221	86
Foreign companies	2 110	3 463	3 157	469	231	175	875	565
State enterprises	3 163	3 284	2 830	290	164	397	851	666
Governments	5 771	7 663	4 086	269	97	262	628	1 849
International organizations	3 070	3 122	4 141	87	276	202	565	570
by currency of denomination								
German mark	3 789	5 379	4 839	5	103	97	205	1 613
Swiss franc	5 698	9 777	7 617	926	551	662	2 139	1 715
Dutch guilder	385	75	259	45	—	87	132	31
Japanese yen	3 826	1 833	1 088	98	218	132	448	229
Other	671	685	718	51	14	151	216	148
Foreign bonds in the United States, total	**5 795**	**4 515**	**3 429**	**40**	**350**	**200**	**590**	**869**
by category of borrower								
Canadian entities	3 142	2 193	2 136	11	250	—	261	545
International organizations	459	1 100	550	—	—	—	—	250
Other	2 194	1 222	743	29	100	200	329	74
By country of borrower:								
Industrial countries	**24 964**	**31 886**	**32 721**	**3 583**	**2 076**	**2 212**	**7 871**	**6 635**
Australia	1 218	593	539	—	—	96	96	230
Austria	1 027	1 218	1 859	192	26	126	344	365
Canada	4 764	4 197	3 797	371	427	288	1 086	672
Denmark	1 017	752	1 125	—	—	100	100	204
Finland	952	699	392	5	—	34	39	196
France	1 286	2 106	2 809	539	183	313	1 035	383
Japan	3 467	5 775	5 309	532	350	478	1 360	1 110
Netherlands	250	832	1 592	49	76	—	125	155
Norway	2 751	1 954	892	40	—	27	67	453
Sweden	876	1 530	3 244	255	200	198	653	564
United Kingdom	1 365	1 181	1 733	100	—	30	130	120
United States	2 973	6 767	5 580	425	670	218	1 313	1 618
Developing countries	**4 227**	**3 093**	**2 485**	**59**	**193**	**376**	**628**	**418**
Non-OPEC countries	2 684	2 675	1 942	59	175	280	514	198
Brazil	843	930	349	—	—	—	—	—
Mexico	568	363	544	29	125	245	399	74
Philippines	170	175	70	—	30	—	30	—
OPEC countries	1 543	418	543	—	18	96	114	220
Algeria	721	208	—	—	—	—	—	—
Venezuela	598	55	398	—	—	96	96	120
Communist countries	**30**	**75**	**65**	**30**	—	—	**30**	—
Hungary	—	—	65	—	—	—	—	—
International organizations	**5 058**	**5 936**	**6 638**	**252**	**373**	**402**	**1 027**	**895**
TOTAL	**34 279**	**40 990**	**41 909**	**3 924**	**2 642**	**2 990**	**9 556**	**7 948**

Central bank discount rates

	1977	*1978*	*1979*	*1980*				*Current*	
	end Dec	*end Dec*	*end Dec*	*end Mar*	*end Jun*	*end Sep*	*end Dec*	*Mar 25 1981*	*effective since*
United States	6.00	9.50	12.00	16.00[a]	11.00	11.00	13.00	13.00	Dec 5, 80
Canada	7.50	10.75	14.00	14.19	11.83	11.20	17.36	16.59	Mar 19, 81
Japan	4.25	3.50	6.25	9.00	9.00	8.25	7.25	6.25	Mar 18, 81
United Kingdom	7.00	12.50	17.00	17.00	17.00	16.00	14.00	12.00	Mar 11, 81
Belgium	9.00	6.00	10.50	14.00	13.00	12.00	12.00	13.00	Mar 25, 81
France	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	3.00	3.00	6.00	7.00	7.50	7.50	7.50	7.50	May 2, 80
Italy	11.50	10.50	15.00	15.00	15.00	16.50	16.50	19.00	Mar 23, 81
Netherlands	4.50	6.50	9.50	9.50	9.50	8.50	8.00	9.00	Mar 3, 81
Austria	5.50	4.50	3.75	6.75	6.75	6.75	6.75	6.75	Mar 21, 80
Denmark	9.00	8.00	11.00	13.00	13.00	12.00	11.00	11.00	Oct 27, 80
Finland	8.25	7.25	8.50	9.25	9.25	9.25	9.25	9.25	Feb 1, 80
Ireland	6.75	11.85	16.40	16.85	16.85	13.50	12.75	13.15	Feb 6, 81
Norway	6.00	7.00	9.00	9.00	9.00	9.00	9.00	9.00	Nov 30, 79
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	Jul 26, 77
Sweden	8.00	6.50	9.00	10.00	10.00	10.00	10.00	12.00	Jan 20, 81
Switzerland	1.50	1.00	2.00	3.00	3.00	3.00	3.00	4.00	Feb 20, 81
Argentina	165.27	108.19	89.90	74.98	85.86	69.64	87.01	100.21	Feb 17, 81
Korea	14.00	14.50	14.50	20.50	19.50	17.50	15.50	15.50	Nov 11, 80
New Zealand	10.00	10.50	13.00	13.00	13.00	14.00	14.00	14.00	Jul, 80
Philippines	6.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	May 19, 78
Singapore	3.50	4.50	6.75	8.50	8.50	8.75	10.50	11.00	Jan 12, 81
South Africa	9.00	8.50	7.00	7.00	7.00	7.00	7.00	8.00	Feb 3, 81
Venezuela	7.00	7.50	11.00	12.00	10.00	10.00	13.00	13.00	Nov 14, 80

[a] applicable to large banks; 13% for other banks

Day-to-day money rates

monthly averages

	1977	*1978*	*1979*	*1980*						*1981*	
	Dec	*Dec*	*Dec*	*Jul*	*Aug*	*Sep*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*
United States	6.56	10.03	13.78	9.03	9.61	10.87	12.81	15.85	18.90	19.08	16.12
Canada	6.84	9.44	13.83	10.20	9.86	9.82	10.70	11.05	15.61	16.93	16.58
Japan	5.01	4.57	8.02	12.68	12.11	11.40	11.00	9.61	9.49	8.90	8.54
Australia	9.96	8.40	7.84	10.91	9.63	9.81	8.96	9.84	9.51	9.69	10.35
United Kingdom	4.81	10.00	14.87	15.06	14.87	14.90	15.00	12.25	13.00	12.19	12.19
Belgium	7.48	6.73	10.65	11.87	10.01	9.64	9.60	10.16	9.68	10.32	9.18
France	9.30	6.67	12.17	12.04	11.32	11.37	11.22	10.74	10.87	10.73	10.91
Germany	3.24	3.61	9.15	9.81	8.95	9.28	8.98	8.82	9.13	9.13	10.57
Italy	11.37	11.00	16.00	16.87	16.87	16.87	17.87	17.62	17.50	17.37	17.37
Netherlands	5.27	10.00	15.67	10.34	10.11	9.75	9.30	9.00	8.37	8.95	9.12
Austria	9.25	5.37	8.50	10.75	10.25	11.00	11.00	11.50	11.50	9.50	9.00
Finland	22.99	9.29	13.53	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50
Ireland	8.00	12.12	16.88	16.81	13.75	13.62	13.25	13.38	13.31	13.44	13.38
Spain	7.22	16.75	9.61	12.71	12.57	13.16	14.38	15.24	16.74	15.89	12.50
Sweden	8.91	6.26	11.99	11.75	12.90	11.95	13.00	11.80	11.41	12.75	16.97
Switzerland	0.85	0.00	1.25	2.50	6.50	2.00	0.87	3.37	5.75	3.75	3.50
Argentina	n.a.	n.a.	78.22	83.39	52.89	51.36	54.58	58.04	70.84	74.81	92.07
Brazil	28.44	35.64	32.28	30.84	31.80	35.76	38.28	40.56	49.68	51.60	54.48
Hong Kong	4.87	9.67	14.19	7.25	8.75	8.31	10.87	13.87	14.05	14.18	18.00
Korea	14.40	15.00	15.00	19.20	19.20	17.22	17.22	14.82	14.82	14.82	14.82
Philippines	14.44	13.22	16.25	10.44	6.47	9.71	9.26	13.10	15.70	13.66	14.43
Singapore	3.59	4.98	10.17	9.15	8.97	10.75	14.53	11.06	10.23	11.77	12.73
South Africa	7.65	7.11	3.81	4.26	4.15	4.35	4.47	4.99	5.60	6.22	7.06
Euro-dollars	6.94	10.80	14.41	9.13	9.86	10.96	13.18	16.15	19.22	19.05	16.14

Treasury bill rates

bond-equivalent yields, at or near end of month

	1977	1978	1979	1980						1981	
	Dec	*Dec*	*Dec*	*Jul*	*Aug*	*Sep*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*
United States	6.33	9.42	12.39	9.12	10.70	11.09	13.07	14.84	14.87	15.83	14.80
Canada	7.17	10.46	13.66	10.06	10.49	10.95	11.91	13.70	17.01	16.86	16.83
Japan	4.15	3.39	5.68	6.82	6.82	6.44	6.44	5.93	5.93	5.93	5.93
Australia	8.35	8.35	9.31	10.64	10.53	10.56	10.95	11.47	12.17	12.42	12.68
United Kingdom	6.42	12.01	16.45	14.69	15.00	14.37	14.44	13.38	13.45	13.45	12.30
Belgium	9.25	9.25	14.40	12.75	12.35	12.35	12.10	12.75	12.75	12.10	13.25
Ireland	6.74	11.83	16.37	16.46	13.47	13.43	12.72	12.78	12.84	12.83	12.84
Italy	12.81	12.81	15.62	16.25	16.12	16.00	16.87	16.87	16.87	17.69	17.69
Netherlands	6.00	9.50	12.75	9.87	10.25	9.25	8.85	[illegible]	8.00	8.75	8.75
Sweden	9.21	5.84	9.74	12.84	12.84	12.90	12.90	12.90	12.87	16.85	16.85
Argentina	109.06	82.55	71.04	70.43	48.60	51.03	58.31	60.73	66.19	69.10	90.06
Brazil	38.08	41.21	27.84	39.14	42.66	43.70	50.18	66.34	76.84	78.24	73.58
Korea	16.88	17.01	19.53	22.01	22.01	19.50	19.50	16.35	16.35	18.98	18.98
Mexico	n.a.	12.75	17.89	20.91	21.36	23.42	24.73	[illegible]	27.73	n.a.	n.a.
New Zealand	7.50	10.50	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.50	11.25
Philippines	10.04	12.08	12.63	12.54	12.66	12.67	12.70	12.75	12.74	12.65	12.65
Singapore	3.17	4.01	6.18	6.79	6.89	6.99	6.98	6.86	6.77	6.86	6.84
South Africa	6.17	7.61	4.30	4.47	4.64	4.84	5.13	5.71	6.31	6.89	7.59

Representative money-market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money-market instruments, other than Treasury bills, at or near end of month

	1977	1978	1979	1980						1981	
	Dec	*Dec*	*Dec*	*Jul*	*Aug*	*Sep*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*
United States	6.84	10.57	13.70	8.82	10.91	12.24	14.24	17.15	17.62	16.67	15.48
Canada	7.25	10.62	14.15	10.60	10.75	11.10	12.50	14.10	17.50	16.95	16.85
Japan	5.89	4.64	8.01	11.54	10.95	11.48	9.57	9.80	9.80	8.32	8.37
Australia	9.75	9.10	10.30	12.50	12.40	12.00	11.70	11.75	13.00	13.25	14.00
United Kingdom	6.50	12.50	17.00	14.87	16.69	15.87	16.62	14.50	14.75	13.19	12.50
Belgium	9.50	9.25	14.45	13.00	12.60	12.60	12.45	13.00	13.10	12.35	13.00
France	9.19	6.44	12.62	11.44	11.62	12.31	11.31	11.44	11.56	11.25	13.50
Germany	3.60	3.70	8.70	9.30	8.90	9.10	9.20	9.45	10.20	9.45	14.50
Ireland	6.75	13.00	18.12	16.75	14.50	13.75	13.37	13.75	13.62	13.87	14.78
Italy	11.75	11.37	17.12	17.25	17.25	18.75	17.75	17.37	17.37	17.37	17.50
Netherlands	6.25	10.50	13.00	9.37	10.75	10.37	9.25	10.00	9.37	9.50	11.25
Spain	12.06	22.80	13.20	15.00	14.60	14.40	15.30	16.00	17.40	17.40	15.00
Switzerland	2.02	0.50	6.12	5.25	6.12	5.87	5.62	6.12	7.50	6.00	8.50
Hong Kong	5.73	11.82	14.37	7.94	9.25	10.44	12.56	15.87	17.69	15.53	16.86
Korea	16.88	17.01	19.53	22.01	22.01	19.27	19.27	16.35	16.35	16.35	16.35
New Zealand	11.87	12.00	16.00	13.25	13.40	14.00	14.25	14.10	14.25	14.35	14.80
Philippines	11.96	11.48	10.41	9.96	10.92	10.97	11.96	13.15	15.01	15.98	16.86
Singapore	4.81	7.38	10.12	9.50	9.50	11.62	13.62	14.12	14.12	14.25	13.69
South Africa	9.00	7.85	4.72	4.93	4.93	5.00	5.05	6.07	7.12	8.42	9.73

Commercial bank deposit rates

at or near end of month

	1977	1978	1979	1980						1981	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	6.80	10.90	13.55	8.90	11.55	12.25	14.25	17.07	16.25	16.00	14.75
Canada	7.25	10.45	14.05	10.50	10.75	10.65	12.40	13.95	17.00	16.90	17.15
Japan	3.25	2.50	8.37	11.50	11.00	11.30	9.50	9.90	9.00	8.72	8.25
Australia	9.50	8.50	10.25	12.41	12.03	11.33	10.95	11.21	12.71	12.85	14.14
United Kingdom	6.37	12.25	16.81	15.87	16.75	15.94	16.75	14.44	14.87	13.44	12.37
Belgium	9.50	9.87	14.50	12.50	12.63	12.50	12.13	13.00	12.63	12.13	13.50
France	9.00	6.50	12.50	11.25	11.62	11.75	11.00	11.50	11.25	11.25	12.00
Germany	3.40	3.50	7.75	8.60	8.40	8.40	8.40	8.75	8.00	8.70	13.50
Italy	17.00	12.50	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25
Netherlands	7.00	11.62	13.50	9.50	10.62	10.25	9.75	10.25	9.50	9.62	11.50
Austria	9.00	6.75	8.50	10.75	11.37	11.62	11.50	11.50	11.25	10.00	9.75
Denmark	8.00	7.00	10.00	12.00	12.00	11.00	10.00	10.00	10.00	10.00	10.00
Finland	4.25	3.25	4.25	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Ireland	6.87	12.75	17.87	16.25	14.00	13.87	13.25	13.75	13.62	13.50	14.62
Norway	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Spain	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Sweden	7.75	6.25	8.75	9.75	9.75	9.75	9.75	9.75	9.75	11.75	11.25
Switzerland	1.12	0.12	4.75	4.75	5.00	5.25	5.62	6.12	7.50	6.12	8.50
Argentina	n.a.	86.63	72.64	70.57	53.05	50.61	59.00	62.00	72.00	76.50	97.00
Brazil	39.60	46.80	45.00	45.24	47.40	49.56	54.48	61.20	69.48	72.00	72.84
Hong Kong	1.75	4.50	9.25	6.00	6.00	6.00	9.00	13.00	13.00	13.00	13.25
Korea	13.20	15.00	15.00	19.20	19.20	17.22	17.22	14.82	14.82	14.82	14.82
Mexico	11.00	12.00	16.75	18.20	18.98	20.74	21.74	23.25	26.15	n.a.	n.a.
New Zealand	11.00	12.00	15.90	13.25	13.30	13.05	13.50	13.50	13.50	13.75	14.00
Philippines	8.50	8.50	10.50	10.50	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Singapore	5.31	7.31	10.31	8.69	9.38	11.44	13.00	13.50	13.19	12.62	12.19
South Africa	8.70	7.30	4.82	4.75	4.77	4.90	5.10	6.62	7.87	9.25	10.75
Venezuela	7.00	7.25	15.00	12.00	12.00	12.00	12.00	12.00	16.00	16.00	16.00

Commercial bank lending rates to prime borrowers

at or near end of month

	1977	1978	1979	1980						1981	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	7.75	11.75	15.25	11.00	11.50	13.00	14.50	17.75	21.50	20.00	19.00
Canada	8.25	11.50	15.00	12.50	12.50	12.25	12.75	14.50	18.25	18.25	18.25
Japan	5.47	4.50	6.51	9.34	9.27	8.99	8.82	8.58	8.30	8.00	8.00
Australia	11.50	11.00	10.75	12.50	12.50	12.50	12.50	12.50	13.50	13.50	13.50
United Kingdom	8.00	13.50	18.00	17.50	17.50	17.50	17.50	15.00	15.00	15.00	15.00
Belgium	10.00	10.00	15.25	17.00	15.75	15.75	15.75	15.75	15.75	15.25	15.25
France	11.35	10.95	13.65	13.90	13.40	13.40	13.40	13.40	13.40	13.40	14.15
Germany	6.00	5.50	9.75	11.50	11.50	11.50	11.50	11.50	11.50	11.50	12.00
Italy	16.00	15.00	19.50	19.50	19.50	19.50	19.50	21.00	20.50	20.50	20.50
Netherlands	7.00	12.00	15.00	11.25	11.75	11.25	10.25	10.75	10.75	10.50	10.75
Austria	9.75	8.75	8.50	11.00	11.00	12.00	12.00	12.25	12.50	12.50	12.50
Denmark	12.50	10.00	13.75	15.75	15.75	14.75	13.75	13.75	13.75	13.75	13.75
Finland	8.85	7.87	9.06	9.84	9.83	9.84	9.83	9.82	9.83	n.a.	n.a.
Ireland	8.25	13.75	16.00	17.50	15.50	15.50	14.50	14.50	14.50	14.50	14.50
Norway	8.33	11.00	11.00	11.00	11.00	12.50	12.50	12.50	12.50	12.50	12.50
Spain	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00
Sweden	10.25	8.50	10.75	11.75	11.75	11.75	11.75	11.75	11.75	13.75	13.75
Switzerland	5.75	5.00	5.00	5.75	5.75	5.75	5.75	5.75	5.75	5.75	6.00
Argentina	152.08	86.75	80.00	74.50	58.50	53.00	60.00	66.00	77.00	81.00	114.00
Brazil	52.05	61.70	57.00	57.00	57.00	57.00	57.00	88.00	88.00	133.75	133.75
Hong Kong	4.75	8.75	14.50	10.00	10.00	10.50	13.00	17.00	17.00	17.00	17.00
Korea	15.00	18.50	18.50	23.50	23.50	21.50	21.50	19.50	19.50	19.50	19.50
Mexico	17.00	17.50	19.00	22.53	22.82	23.51	24.42	24.77	26.25	27.46	27.98
New Zealand	8.50	9.75	11.75	12.75	12.75	13.00	13.00	13.00	13.00	13.00	13.00
Philippines	14.00	14.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
Singapore	7.02	7.65	9.50	11.10	10.95	11.30	12.60	13.55	13.60	14.30	14.30
South Africa	12.50	11.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	10.00	11.00
Venezuela	9.50	10.25	13.00	12.00	12.00	12.00	12.00	12.00	15.00	15.00	15.00

Domestic government bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980						1981	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	7.97	9.00	10.20	10.70	11.46	11.90	12.33	12.25	11.46	12.76	13.16
Canada	8.77	9.68	11.3[illegible]	12.32	12.42	12.98	13.22	13.01	12.69	12.96	13.38
Japan	6.40	6.40	8.63	8.63	8.77	8.92	8.84	9.26	9.04	8.84	8.89
Australia	9.50	8.90	10.45	11.80	11.85	12.00	12.40	12.60	13.00	13.10	13.10
United Kingdom	10.53	12.75	13.83	12.52	13.27	12.69	12.52	12.65	13.05	13.25	13.36
Belgium	8.76	8.80	11.13	11.77	12.08	12.43	12.46	12.61	13.04	13.19	13.44
France	11.07	9.94	12.59	13.43	13.46	13.85	14.27	14.24	14.31	14.58	15.05
Germany	5.52	6.65	7.91	7.78	7.95	8.24	8.55	8.59	9.19	9.07	10.38
Italy	10.82	10.89	11.28	12.06	12.00	12.12	12.53	12.42	12.12	12.44	12.88
Netherlands	8.11	8.48	9.29	9.66	10.08	10.25	10.20	10.46	10.48	10.43	10.96
Austria	9.00	7.91	8.20	9.21	9.62	9.61	9.90	10.11	9.62	9.80	n.a.
Denmark	16.83	17.27	18.28	19.95	20.71	20.29	19.24	19.40	19.62	18.56	18.90
Finland	10.25	9.19	9.58	10.49	10.52	10.35	10.48	10.43	10.42	10.92	n.a.
Ireland	11.30	13.44	16.64	14.64	14.49	14.57	14.77	14.91	15.63	16.22	n.a.
Norway	8.37	8.19	10.04	10.21	10.73	n.a.	10.40	10.44	10.44	11.70	11.50
Sweden	9.84	10.09	11.22	11.38	11.46	12.63	12.68	12.71	12.61	n.a.	n.a.
Switzerland	3.75	3.03	4.20	4.59	4.87	4.85	4.69	4.67	4.63	4.79	5.20
Argentina	181.65	112.18	47.94	81.94	42.24	40.46	38.21	101.38	36.84	34.97	42.99
New Zealand	10.00	10.02	12.98	13.40	13.25	12.98	12.96	12.96	12.99	12.81	n.a.
Philippines	13.40	13.40	13.20	13.40	13.40	13.40	13.40	13.40	13.40	13.40	13.40
South Africa	10.75	9.85	9.44	10.00	10.05	10.62	11.10	11.75	11.80	12.67	12.77
Venezuela	7.24	7.24	7.29	7.45	7.37	7.40	7.40	7.43	7.39	7.44	7.40

Domestic corporate bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980						1981	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	8.30	9.25	10.75	11.65	12.50	12.88	13.38	13.38	13.00	13.63	14.13
Canada	9.71	10.34	12.07	13.19	13.35	13.74	13.95	13.72	13.62	13.84	14.34
Japan	6.68	6.94	8.34	8.20	8.24	8.44	8.48	8.60	8.60	8.49	8.25
Australia	11.00	10.25	11.65	13.15	13.25	13.35	13.75	14.00	14.25	14.25	14.10
United Kingdom	11.88	13.53	14.96	13.33	13.90	13.78	13.61	13.63	14.21	14.20	14.14
Belgium	9.85	9.58	11.93	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
France	12.09	10.27	12.92	13.93	13.86	14.03	14.69	14.83	15.23	14.62	15.13
Germany	5.92	6.80	8.20	8.40	8.10	8.40	8.80	9.30	9.50	9.50	n.a.
Italy	10.71	10.12	10.22	14.19	13.73	13.31	12.64	12.65	12.99	12.80	13.05
Netherlands	7.90	8.62	9.95	9.83	10.33	10.49	10.48	10.33	10.71	10.46	10.77
Norway	8.59	8.37	10.53	10.65	10.70	n.a.	10.55	11.24	11.24	11.75	12.07
Spain	11.58	12.17	11.77	10.90	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweden	9.83	10.03	10.21	11.80	11.90	11.94	11.99	12.10	11.95	13.37	13.46
Switzerland	4.96	4.85	5.53	5.58	5.76	5.83	5.71	5.78	5.63	5.78	5.93
Korea	19.60	24.00	32.50	29.00	28.70	26.00	26.00	23.50	26.30	26.30	24.70
Mexico	17.56	20.37	21.99	24.99	26.26	26.13	26.12	27.55	28.03	28.33	30.90
Venezuela	10.39	12.43	14.55	12.82	12.41	12.40	13.55	14.78	16.15	16.65	16.20

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World Financial Markets

Morgan Guaranty Trust Company of New York

April 1981

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Foreign exchange market developments

The dollar has strengthened again in recent weeks, following a brief dip in mid-March. It has gained against virtually all major currencies since the end of last year (see Table 1). On an effective or trade-weighted average basis, the dollar now stands nearly 5½% above its December 1980 level. Reflecting also the United States' adverse inflation differential, the dollar's rise in real terms has exceeded 7% since last December. This brings the dollar's real effective appreciation since October 1978 to more than 15%.

The dollar's recent strengthening is partly attributable to the renewed firmness of U.S. interest rates and the prospect of perhaps no more than a modest decline in rates later this year. The Federal funds rate has risen to around 15%-16%, up from 13½% in the third week of March. Rates for most private money market instruments have risen by 200-225 basis points since mid-March, and the banks' prime lending rate has moved back up to 17½%. Three-month Euro-dollar rates have climbed to 16½% from a March low of 14⅛%.

These increases in U.S. and Euro-dollar rates have not been matched by rate movements abroad, with a consequent widening of interest differentials favoring the United States (see chart). German money market rates have edged up by only 50-75 basis points since mid-March, while short-term rates in Japan and the United Kingdom have drifted lower.

The decision of monetary authorities abroad not to match fully the latest firming of short-term rates in the United States has been influenced by the relatively weak levels of activity in their domestic economies and, in some countries, by the already high level of their interest rates in real terms (see Table 2). In Germany, the continued very high level of real interest rates in the face of substantial unemployment has sparked a major internal policy debate. In Belgium, where real interest rates have been among the highest, officials quickly reversed part of their earlier boost in rates at the first sign of an easing of heavy pressures on the franc. In Japan, where real short-term interest rates are barely positive and the government is anxious to stimulate economic activity, the monetary authorities have done little more than cushion the drop in domestic short-term rates.

There also has been little official dollar intervention in the exchange markets in recent weeks. This contrasts sharply with the situation late last year and earlier this year when

Table 1

Exchange rate changes from December 31, 1980 to April 27, 1981

in percent vis-a-vis the U.S. dollar and on a trade-weighted average basis

	vis-a-vis U.S. dollar	*trade-weighted average basis*
U.S. dollar	—	5.4
Japanese yen	—4.3	0.4
Belgian franc	—11.0	—0.8
Dutch guilder	—12.4	—3.1
French franc	—12.3	—3.1
German mark	—9.5	—0.5
Italian lira	—14.5	5.6
Swiss franc	—10.1	—0.9
British pound	—9.4	—1.5

Table 2

Real interest rates[1]

3-month money market rates deflated by consumer price inflation in past twelve months

	Sep 1980	Dec 1980	mid-Apr 1981
United States	—0.4	4.7	4.4
Japan	2.6	2.8	0.2
Belgium	5.5	5.2	9.3
France	—1.1	—1.8	0.3
Germany	4.5	3.6	7.1
Italy	—2.1	—3.2	—0.1
Netherlands	3.1	2.5	3.4
United Kingdom	0.0	—0.3	—0.3

[1] Excludes effects of the tax treatment of interest income and expense.

Interbank rates except for U.S. (commercial paper), Japan (repurchase agreements), and Belgium (Fonds des Rentes).

intervention in support of the German mark was very heavy. The bulk of the latter was initiated by U.S. authorities, who sought marks for repayment of DM-denominated Carter bonds (equivalent to $5.2 billion) at maturity and also for future intervention use. Now, Reagan Administration officials, in a major policy shift from the previous administration and reflecting their concentration on domestic policies and their belief in free-market-determined rates, have stated their intention not to intervene in foreign exchange markets to influence the dollar rate, except in extreme circumstances. Reportedly, the only U.S. intervention in the past two months was on the day President Reagan was wounded. The Bundesbank's dollar intervention has continued to be modest since its tightening of monetary policy in mid-February. Similarly, the Bank of Japan has not intervened heavily to resist the recent weakening of the yen against the dollar.

The firmness of U.S. short-term interest rates results from the Federal Reserve's restrictive monetary policy, which aims at slowing the growth of U.S. monetary aggregates, in the face of buoyant economic activity. Real GNP growth accelerated to a 6½% annual rate in the first quarter of 1980. The growth of the monetary aggregates also has been quite strong so far this year. M1B advanced at an 11.8% annual rate in the thirteen weeks ended April 15, 1981, rising above the upper limit of the Federal Reserve's fourth-quarter target range (see chart). Broader measures of the money supply also have advanced rapidly in relation to their annual targets, with M2 close to its upper limit in March and M3 still slightly above its target band (see chart).

Evidence suggests that U.S. economic activity is now slowing. Real GNP may level out over the next few months, and nominal spending growth could slow from nearly a 15% annual rate in the first quarter to only around a 10%-11% rate in the current and possibly third quarters. This is likely to lead to some easing in the growth of demand for money, although perhaps not in proportion to the slowdown in expenditure growth since the velocity of circulation of M1B is unlikely to continue increasing at its rapid first-quarter rate. Federal Reserve efforts to temper the growth of the monetary aggregates could mitigate the decline in interest rates in the near term, particularly since lower rates will tend to decrease velocity.

Thus, the decline of U.S. short-term interest rates later this spring or summer, which could be expected to accompany a slowing of economic activity and inflation, may well be relatively modest. Any reductions in U.S. rates are likely to be accompanied by a lowering of rates in Germany and elsewhere in Europe, as well as in Japan. Moreover, should U.S. economic activity reaccelerate next fall and winter under the influence of tax cuts and rising defense expenditures, U.S. interest rates could turn up again as the growth in total spending runs up against the Federal Reserve's monetary targets. Thus, over time the dollar will continue to receive considerable support from interest-rate considerations.

Short-term interest rates, however, could fluctuate quite widely in the period ahead. Since October 1979, the Federal Reserve has been targeting nonborrowed reserves, but in conducting day-to-day operations it has closely monitored the Federal funds rate for indications of whether the growth in bank reserves was diverging from the desired path. Recently, it has become apparent that Federal Reserve open market operations to add or drain reserves are no longer being guided closely by

Interest rate differentials vis-à-vis Euro-dollars

based on 3-month rates in percent per annum

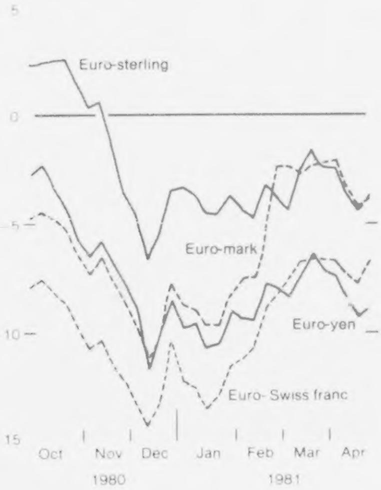


Table 3

Bilateral trade balances

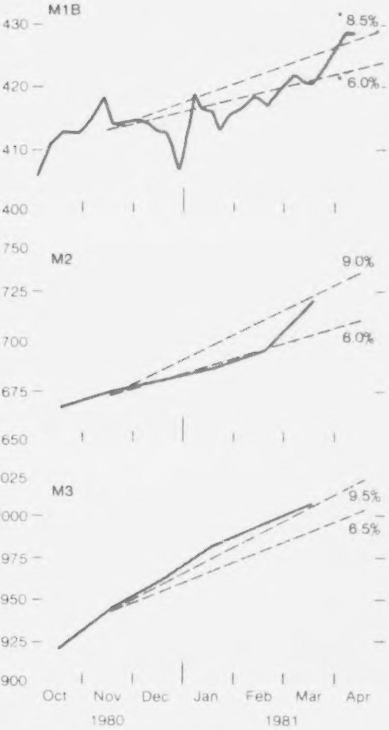
in billions of dollars

	1979	*1980*	*change 1979-80*
United States with[1]			
Western Europe	12.3	20.5	+8.2
Japan	—8.6	—10.4	—1.8
Japan with[2]			
United States	7.6	9.0	+1.4
Western Europe	6.0	11.0	+5.0
Western Europe with[3]			
United States	—12.3	—20.5	—8.2
Japan	—6.0	—11.0	—5.0

[1] Based on U.S. balance-of-payments data.
[2] Based on Japanese balance-of-payments data.
[3] Based on U.S. and Japanese data.

U.S. money supply and target ranges

in billions of dollars



*Adjusted for transfers to NOW accounts

the level of the Federal funds rate. This implies that the Federal Reserve will tolerate wide swings in the funds rate, even outside the broad bands (recently 15%-20%) established as an operational guide. The authorities apparently will focus almost entirely on reserve targets, which are not publicly disclosed. This drastic downgrading of the Federal funds rate as a policy signal has an unsettling effect on markets, contributing to greater short-run fluctuations of interest rates — at least for a transition period of indeterminate length. Taken together with lessened exchange market intervention, even for smoothing purposes, the result is likely to be more volatile exchange rates.

Current account imbalances

The realignment of exchange rates over the past year or so is bound to have some impact on trade and current account balances. On a real effective exchange rate basis, the dollar is now about 9% above its 1975-79 average level and the yen about 5% higher, while the German mark is more than 5% below its 1975-79 average level. At the turn of the year, the United States was close to current account equilibrium, Japan was approaching equilibrium from a large deficit early last year, and continental Europe was in deep deficit. The development of the present configuration of industrial-country current accounts has been closely mirrored in the development of bilateral trade balances between the United States, Japan, and Western Europe. As shown in Table 3, the U.S. trade surplus with Western Europe increased by $8 billion between 1979 and 1980, while its bilateral trade deficit with Japan widened by about $2 billion. Western Europe's trade deficit with Japan worsened by nearly $5 billion, so that its combined deficit with the United States and Japan increased by approximately $13 billion last year, to $31 billion. Japan increased its trade surplus with both the United States and Europe by nearly $6½ billion, to about $20 billion.

The shifts in real effective exchange rates over the past year have been in directions that should in time narrow these imbalances, especially in volume terms. German export order volume, for example, has increased strongly in recent months — up nearly 15% between September-October 1980 and January-February 1981. However, the speed and degree of current account adjustment will, of course, depend on several other factors. For one, the initial J-curve effects of exchange rate changes are tending to magnify or at least prolong existing imbalances. In Germany and other European countries, for example, depreciation has boosted the domestic currency prices of imports of oil and other commodities relative to export prices, whereas in the United States appreciation has dampened dollar prices of manufactures imports from Europe.

Another important factor is growth differentials. The strong upturn of the U.S. economy in late 1980 and early 1981 in the face of a slowdown in Japan and a sharp downturn in Europe caused some deterioration in the overall U.S. current account as well as its bilateral trade balances with Europe and Japan. Now, however, U.S. economic activity is slowing again, partly under the impact of high interest rates. Uncertainties as to the nature and timing of proposed tax cuts make it difficult to assess when the widely anticipated resumption of U.S. economic expansion will occur and how robust it will be. Japanese authorities have been attempting to stimulate their economy by lowering interest rates, but it is unclear when stronger growth will take hold. Europe is in the midst of a recession, and

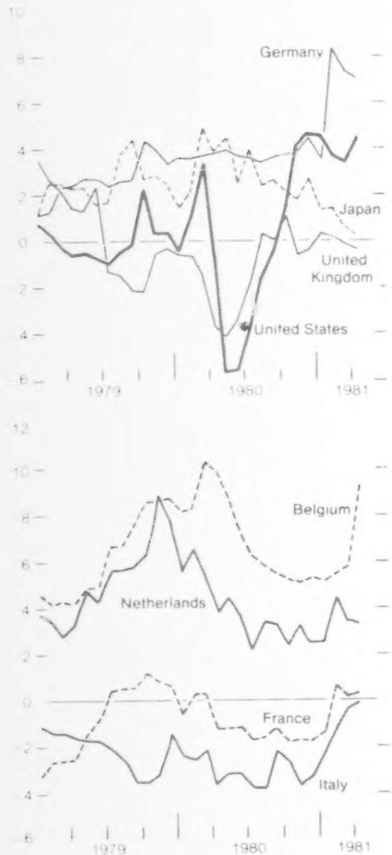
Table 4

Current accounts and real effective exchange rates

	Current account balances in 1980 as % of GNP	% change in real effective exchange rate from 1975-79 average level to April 27, 1981
United States	0.0	9.1
Japan	—1.0	5.1
Belgium	—5.1	—7.4
France	—1.1	—1.9
Germany	—1.9	—5.1
Italy	—2.5	—2.7
Netherlands	—1.7	—13.2
United Kingdom	1.4	40.5

Real interest rates

3-month money market rates deflated by consumer price inflation in past 12 months, in percent per annum



while there have been a few signs that economic activity may be starting to level out, recovery will be delayed until later this year by the recent upswing in interest rates and tightening of monetary policies. With large budget deficits limiting the scope for offsetting fiscal stimulation, the high level of real interest rates will restrain demand, and thereby contribute to a narrowing of current account deficits in Europe.

The extent of future current account shifts also will be influenced by energy imports. With domestic oil consumption falling in virtually all industrial countries, the declines — 5% in the first quarter of 1981 from a year earlier for the United States — will have a greater proportional impact on net oil import volume for the United States than for Japan and continental Europe, since the U.S. imports less than 40% of its total consumption. Moreover, to the extent that oil consumption declines are due to switching to alternative energy sources, the United States benefits most because the bulk of these alternative sources are available domestically, whereas Japan and continental Europe have to import a substantial portion.

Thus, while the realignment of exchange rates clearly has set the stage for correction of some of the current account imbalances among industrial countries, it is too early to say whether the realignment has run its course. There still are a number of factors that over time could work in favor of the dollar. In the near term, initial J-curve effects and possible delays in the emergence of a more decisive growth differential could limit the extent of payments adjustment. Over the longer run, relative trends in energy trade as well as interest rate considerations could support the dollar. There also are signs of a narrowing in the United States' adverse inflation differential. The U.S. GNP deflator increased at only a 7.8% annual rate in the first quarter of 1981 and consumer prices rose at only a 7.2% rate in March alone. Furthermore, political developments could bolster confidence in the dollar from time to time. Therefore, although exchange rates undoubtedly will fluctuate considerably in the period ahead, the dollar will continue to enjoy considerable support.

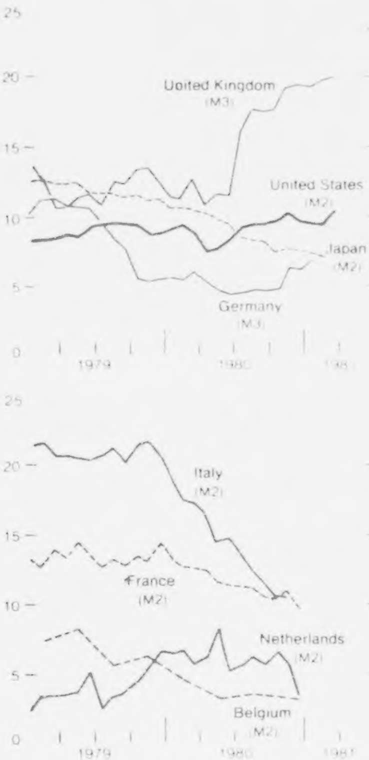
EMS strains

In addition to the imbalance between Japan and the United States on the one hand, and continental Europe on the other, there are disequilibria within Europe. In Italy and Belgium, 1980 current account deficits in relation to GNP were 2½% and 5%, respectively, well above Germany's 1.9% (see Table 4). In France, the 1980 payments deficit was less than in Germany, but France's unfavorable inflation differential, particularly relative to Germany, creates a competitiveness problem for the future. These existing and potential imbalances have led to increasing strains within the fixed-rate structure of the European Monetary System. The German move to stabilize the mark by raising interest rates exposed these strains. Previously, the mark's decline against the dollar had pulled down all the EMS currencies, with the mark at the bottom of the EMS band. After February 19, the mark moved to the top of the EMS, and attention shifted to other currencies' weakness.

The Italian lira was the first to be affected. Substantial capital outflows aggravated pressures on the lira stemming from the current account deficit, and a 6% devaluation of the lira's EMS parity was announced on March 22. In addition, the discount rate was raised 2½% to 19%, and money market rates of 20% are now at a substantial premium to German rates. To tighten

Money supply growth

12-month growth rate, in percent per annum



the domestic liquidity squeeze banks' reserve requirements were raised from 15¾% to 20%. On April 16, the government decided to roll back a threatened upsurge in the government deficit, although it could still rise from 10% of GDP in 1980 to over 11% in 1981. Discussions are also underway between labor unions and employers about some dilution of the wage indexation system. However, overall wage rate increases show no sign of falling below price inflation.

After the recent devaluation, the lira is some 5% above its new EMS floor (it has a special, wide band of fluctuation), giving the Bank of Italy some room for maneuver for the time being. But Italian inflation, 20% in the twelve months to March 1981, is expected to remain well above that of other European countries. The lira's real depreciation from its 1975-79 average level is only 2.7%, much less than the German mark's 5% (see Table 4), and very modest in view of Italy's large current deficit, let alone its prospective adverse inflation differential. For the present, the insufficient real exchange rate adjustment is being compensated for by tight monetary policy. Money supply growth (M2) has decelerated to little over 10% (see chart), and real GDP could fall 2½% this year. However, exchange rate pressures are bound to intensify again when a sustained recovery occurs.

After the lira devaluation, the Belgian franc came under severe pressure, which has so far been resisted by the central bank through a combination of market intervention and interest rate hikes. After the increase in the Lombard rate by 2% to 15% on March 25, a further 3% increase to 18% was necessary on March 31. By April 15, pressure on the franc had eased enough for the rate to be lowered by 1% to 17%. Intervention to stabilize the franc totaled $1.6 billion in the last ten days of March alone, and over $3 billion in the January-March period.

The Belgian current account has deteriorated swiftly in the past few years in response to the highest wage costs among industrialized countries and an obsolete industrial structure, notably in steel. The current deficit, nearly $6 billion in 1980, was over 5% of GNP. The Belgian franc's real depreciation from the 1975-79 average level is somewhat greater than Germany's, but its current account deficit is much worse in relation to GNP (see Table 4). A further improvement in international competitiveness appears needed to restore payments equilibrium.

Belgium rejects devaluation because of the inflationary risks inherent in devaluation for an economy where imports are 36% of total supply and 57% of GDP. The labor unions have agreed to no wage increases beyond the automatic wage indexation formula, but moves to bring the increase of wages below the rate of inflation are strongly resisted. Even with the freezing of real wage rates, relative wage costs will only decline very gradually, if at all. The main burden of payments adjustment is therefore placed on deflation of the domestic economy with very high interest rates, which have to be all the higher because of a large government deficit, 10% of GDP. Recently announced budget cuts were needed simply to prevent a substantial increase in the deficit. Interest rates are more than 9% above the rate of inflation, and money supply (M2) only grew 3.3% in the twelve months to December (see chart). Real GDP could fall 2½% in 1981, and unemployment is over 9% and rising.

An easing of this stringent monetary policy will not be possible until competitiveness is improved by a reduction of relative wage costs, and a cut in the government deficit is implemented to reduce pressure

Table 5

Composition of the SDR

	Units of currency	Percentage weights as of Jan 2, 1981[a]	Apr 23, 1981
U.S. dollar	0.54	42	44.6
German mark	0.46	19	17.7
Japanese yen	34.00	13	13.1
British pound	0.071	13	12.8
French franc	0.74	13	11.9
Value of SDR		$1.272	$1.211

[a] These percentage weights also are used in the official IMF SDR interest rate formula.

on the capital markets. Until sufficient political will to tackle these deep-rooted domestic policy problems becomes evident, correction of Belgium's external payments imbalance is far from assured.

Recent mild downward pressures on the French franc stem from worries about the future, especially the outcome of the presidential elections, rather than an existing payments imbalance. The real depreciation from the French franc's 1975-79 average level has been a modest 1.9%. At the root of the concern for the franc lies the threat from inflation, and the expectation that curing it is a lesser policy priority than securing economic growth. The challenger to President Giscard d'Estaing in the forthcoming election runoff is the Socialist candidate, M. Mitterrand. If he is elected, and even if constrained by lack of a National Assembly majority, M. Mitterrand's policies would provoke a larger government deficit and faster wage inflation. Unemployment, exacerbated by rapid growth in France's labor force, is approaching 1.7 million (7.2% of the labor force) and still rising. It is a major issue in the election, and both M. Mitterrand and the incumbent president are pledged to combat its growth through higher public spending.

A larger government deficit after the election could put upward pressure on interest rates, as could the need to defend the franc. While an upward shift in interest rates might be acceptable to defend the franc against pressures that may develop this summer, an indefinite tightening of monetary conditions is probably unacceptable. The growth of money supply in France decelerated to 9.7% by December 1980 (see chart), well below the 11% target ceiling. This may well have contributed to the economic slowdown at a time when inflation has been 13% or higher. This year the monetary growth ceiling is 10%. With inflation expected to be at least 11% in the twelve months to December, real GDP could again bear the brunt, with a slight decline probable.

Immediate steps are needed to cut inflation rapidly to well below 10%, in order to bolster export competitiveness at the present parity and to permit real GDP to grow while monetary discipline is maintained. France's increasing uncompetitiveness is foreshadowed by the rapid widening since 1979 of its bilateral trade deficit with Germany. If such a cut in inflation is not achieved, pressure on the French franc/German mark parity could be expected.

The private SDR and its implications

Since the beginning of this year, the IMF has valued the Special Drawing Right (SDR) in terms of five key currencies (dollar, mark, sterling, French franc, and yen) instead of the sixteen currencies used previously (see Table 5). The new, simpler SDR has been welcomed by official and private institutions alike, and has made the SDR a more attractive unit of account than in the past. The streamlining of the SDR has given new impetus to its use in private financial transactions and to the emergence of mechanisms whereby claims can be settled directly in SDRs.

This article examines the use of the SDR in private financial transactions and assesses its implications for the official IMF SDR and for the evolution of the international monetary system.

Development of the private SDR

Over the past decade the use of the SDR as a unit of account or means of settlement was largely confined to activities of the International Monetary Fund. Despite the prominence accorded the SDR in the negotiations on reform of the international monetary system and repeated references to the SDR's becoming the principal reserve asset, its role has remained very limited. The official SDR now accounts for only about 4% of total international reserves (including gold), or roughly the same percentage as in the early 1970s. Several factors have stood in the way of the official unit's playing a more prominent role in the international monetary system. The unit offered a low rate of capital appreciation *vis-à-vis* the dollar and a below-market interest rate. In addition, the liquidity of the official unit was diminished by the complex procedures employed by the Fund to transfer claims in the SDR Account.

From the perspective of private markets, one of the principal drawbacks of the former SDR index was that it contained sixteen currencies, including some with relatively little investor interest and thin forward foreign exchange markets. This greatly complicated the hedging of SDR transactions by commercial banks as well as their pricing. By eliminating the smaller currencies from the basket, an important obstacle to the use of the SDR unit in private transactions has been removed.

The number of banks offering SDR time deposits has grown rapidly in the past year or so and is now close to fifty. In addition, the number of banks offering SDR CDs has risen since mid-1980, when they were first issued, and is now approaching fifteen. No statistics have been compiled on the volume of SDR time deposits and CDs, although the total is believed to be about $3 billion equivalent.

The principal attraction of the SDR (or any currency basket) is that it offers some investors (or borrowers) an opportunity to reduce the exchange risk arising from fluctuations in individual currencies. Thus, the variability of the overall rate of return from holding an SDR-denominated asset (measured by the standard deviation of the total yield) often is less than that obtained from holding an asset denominated in a single foreign currency. Investors, of course, can also protect themselves from exchange rate fluctuations by diversifying into a number of currencies or by covering themselves in forward markets, although access to foreign capital markets may be limited by government regulations. Insofar as the SDR currency weights are close to their preferred portfolio mix, however, SDR-denominated instruments may provide advantages with respect to convenience and saving on transactions costs. In general, the SDR unit should have greater appeal to investors who have multicurrency commitments. From their standpoint, as shown in Table 6, the variability of yield displayed by a multicurrency instrument such as the SDR is likely to be substantially less than the variability experienced with a single currency instrument such as the dollar or mark. Investors whose commitments are principally in a single currency, on the other hand, may achieve greater stability of yield by holding a portfolio dominated in that currency. The SDR should also be of particular interest to investors who prefer less aggressive management of their foreign-currency portfolios.

The growth of the private market for SDR financial transactions will partly hinge on the extent to which non-bank borrowers are willing to denominate liabilities in the unit. Until this year, SDR-denominated borrowings had been confined to the Euro-bond market. Altogether, nine such bonds have been issued since 1974 (one since the SDR basket was changed), totaling about

SDR 280 million, of which about two thirds represent financings by Scandinavian institutions. In addition, two SDR-denominated floating-rate note issues, totaling SDR 150 million, have been announced so far this year.

SDR borrowing activity has also emerged in the syndicated Euro-credit markets, where two loans have been announced or signed this year: an SDR 500 million tranche for a five-year credit to the Kingdom of Sweden; and an SDR 36 million tranche for an eight-year credit to the Republic of the Ivory Coast. Both of these loans provide for payments in U.S. dollars, although the Swedish loan carries an option to repay in SDRs. Each of the loans also contains safeguard clauses to cover situations in which one or more of the constituent currencies are unavailable or there are changes in the composition of the SDR basket. Partly because the proportional weight of the constituent currencies in the SDR basket varies with market exchange rates (see Table 5), the IMF will review the currency composition and weights once every five years.

The loans are both priced on a floating rate basis, but employ different formulae for calculating the SDR interest rate. The rate on the Kingdom of Sweden loan is computed on the basis of an interest-rate parity calculation involving a Euro-dollar deposit rate and the premium or discount on a forward sale of SDRs. (The SDR forward rate in terms of dollars is calculated as the weighted composite of forward rates of the component currencies). The rate on the Ivory Coast loan, on the other hand, utilizes an average of SDR offered rates quoted by five reference banks.

A potential new SDR borrower is the International Monetary Fund. Over the past year, the IMF has been reviewing the desirability of borrowing from commercial markets as a means of augmenting its londable resources. The Fund, however, has recently concluded arrangements with the Saudi Arabian Monetary Agency (SAMA), whereby SAMA has agreed to lend the Fund SDR 4 billion annually in each of the next two years and possibly for a third year as well. The Fund reportedly has also negotiated arrangements to obtain SDR 1 billion annually both from the government of Kuwait and from the monetary authorities of several industrial countries through the auspices of the Bank for International Settlements. As a consequence, the need for any sizable IMF borrowings from the private markets this year probably has diminished. The IMF bonds issued to SAMA, however, may be in bearer form and could be sold in the market.

An important hurdle that still must be overcome to ensure the growth of a broad market for SDR financial transactions is the development of efficient procedures for settling SDR claims and a well-organized secondary market for SDR securities. So far, the payment for and settlement of SDR claims has either been in a single currency (typically the dollar) or in a package of component currencies. This bank, through its Brussels office, has recently established a system that enables clients to open demand deposit accounts in SDRs and allows account holders to receive and make payments in SDRs. Several other banks reportedly are exploring similar facilities. The development of a Euro-SDR clearing facility to accomodate interbank transfers of SDR claims would further the transformation of the SDR from a unit of account into a new settlement currency. Settlement of SDR securities transactions, moreover, could be handled by Euro-clear, which could eventually give rise to an organized secondary market in SDR securities.

Implications for the official SDR

The private SDR poses a new challenge for the IMF and its SDR. The development of the private SDR has been encouraged by the management of the International Monetary Fund and is being watched with considerable interest by the Fund. The official unit stands to benefit from the lessons of the private market's experiment with SDRs. The official SDR has been severely handicapped by political constraints and bureaucratic complexities. Recently, several steps have been taken to make the official unit a more viable instrument, including the lifting of interest rates paid on the SDR Account and abolition of the "reconstitution"[1] provision.

These actions still fall short of making the official SDR fully market-related. Table 6 details the risk-return characteristics actually observed on reserve currencies and the SDR over the four-year period through the first quarter of 1981 — during which time the dollar depreciated by about 6% against the official SDR. The table also shows how five alternative formulations of the official SDR would have performed over the same period.

The major deficiency of the official unit has been its inferior total yield, counting both interest return and capital appreciation or exchange-rate gain. Several causes can be identified. First, the eleven minor currencies recently dropped from the official unit proved weak in exchange value relative to the five major currencies. The new official SDR (line 9), defined symmetrically on the same five major currencies for both interest and capital value determinations, would have yielded about one percentage point greater total annualized return during the past four years than the old SDR (line 8).

Second, the official interest rate formula offers net *creditors* of the SDR Account (that is, those whose SDR holdings exceed their cumulative allocations) a "rate of remuneration" set at an arbitrary fraction of the weighted-average market rate on the five currencies. This fraction currently stands at 72%, accounting by itself for one third of the nearly five percentage point shortfall in total return of the official unit in the past four years (line 8) relative to the commercial SDR (line 13). From May 1, the Fund will raise the SDR remuneration rate from 72% to 85% of the average market rate, a significant yet still partial step toward market levels. The rate paid by net *debtors* of the SDR Account will be raised to 100% from 80%.

Third, the official SDR interest rate is currently set at the end of each quarter at a fixed level for the quarter ahead on the basis of average market interest rates in a recent computation period. Starting this year, the length of that computation period has been trimmed from three months to three weeks in another attempt to attune the SDR interest rate more closely to market rates. The table demonstrates that this well-intentioned change falls considerably short of full market determination, which would require continuous resetting of the SDR interest rate in line with market rates on other reserve currencies. During the past four years taken as a whole, the three-week lag method now used (line 11) would have given an SDR interest rate that averaged about 0.3 percent below the rate computed without lag (line 12). However, on occasion the three-week lag rate has been as much as 2% below the unlagged rate and at other times as much as 3% above the unlagged rate.

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[1] In the debate leading to the initial creation of SDRs in 1968 the major countries did not fully agree whether the new instruments should be deemed unconditional liquid assets or a form of credit subject to repayment. Some countries were concerned to forestall a shortage of world liquidity, while others feared the inflationary implications of artificial reserve creation. The compromise adopted declared SDRs to be reserve assets, but circumscribed their transferability and specified partial repayment through a "reconstitution" provision. Participants in the SDR Account were required to maintain their average SDR holdings over a five-year period at no less than 30% of their "net cumulative allocation" (the cumulative amount of SDRs created on the books of the IMF and allocated to the individual participants in proportion to Fund quotas). In addition, the group of official institutions eligible to hold SDRs was restricted, participants seeking to reduce SDR holdings were required to make some demonstration of balance-of-payments need, and the terms on which SDR transactions could be effected were prescribed. Over the past decade most of these restrictions have been substantially reduced, in order to make the SDR a more freely usable reserve asset. Furthermore, it has now been decided to abolish the reconstitution provision (the 30% requirement had previously been lowered to 15%). The repayable credit aspect of the SDR Account is thus eliminated.

Fourth, the official formula is geared to domestic money-market yields on short-term government securities or interbank deposits which have averaged nearly 1% lower than yields available from the Euro-markets on similar maturities. Besides superior yield, the Euro-markets provide flexible and readily-accessible investment instruments to both private and official portfolio managers. The Euro-markets' competitive edge over government paper is obviously attractive to central banks seeking high average return on their asset portfolios, with stability of return no worse than experienced with government instruments. In fact, roughly half of all dollar reserve holdings by central banks are invested in the Euro-markets, and the percentage for the central banks of the non-industrial countries is considerably higher. Some central banks, however, continue to prefer government paper and there is opposition by some authorities to the allegedly inflationary credit creation induced by placement of reserve assets in the Euro-markets.

There is an important constraint preventing the yield of the official SDR from being raised to full market levels. The rate of remuneration earned by holders of official SDRs currently is held down by profit and loss consequences of the Fund's

Table 6

Effective yields on reserve assets, 1977Q1-1981Q1

equivalent annual average rates of return; variability measured as quarter-to-quarter standard deviations on total yield

	dollar yield				*variability of nominal yield, from perspective of*		
	interest	*exchange rate gain*	*total (interest plus exchange rate gain)*	*in real terms*[a]	*U.S. resident (US$ basis)*	*German resident (DM basis)*	*World resident (SDR basis)*
3-month Euro deposits							
1. U.S. dollar	10.3	0.0	10.3	—1.0	3.7	25.3	11.3
2. German mark	5.7	3.6	9.5	—1.7	20.1	2.4	12.6
3. Swiss franc	2.8	7.4	10.4	—0.9	35.0	18.5	24.6
4. Japanese yen	6.0	8.6	15.0	3.2	31.7	35.2	25.4
5. British pound	12.4	7.8	21.1	8.7	18.5	21.6	14.0
6. French franc	11.1	0.6	11.8	0.4	17.7	10.4	10.9
7. Gold	—	—	39.1	24.9	155.8	139.1	147.0
SDRs[b]							
8. Official: actual[c]	5.7	1.6	7.4	—3.6	10.6	14.7	5.1
9. new[c]	5.7	2.6	8.4	—2.7	8.9	15.1	1.8
100% of formula interest,[d] *set*							
10. with 3-month lag	8.1	2.6	10.9	—0.4	8.9	16.0	2.3
11. with 3-week lag	8.2	2.6	11.0	—0.3	9.0	16.0	2.5
12. without lag	8.4	2.6	11.3	0.0	8.8	16.2	2.5
13. Private Euro-SDR[e]	9.4	2.6	12.2	0.7	8.8	16.6	2.9

[a] Dollar yield deflated by increase in industrial countries' wholesale prices of manufactured goods.
[b] Exchange rate is that of the new official five-currency unit, except line 8: the old sixteen-currency formulation through December 1980.
[c] Interest rate as on creditor positions in IMF SDR account, i.e., 60% of formula through December 1978, 72% subsequently through April 1981. From May 1981 the remuneration rate will be 85% of formula.
[d] The formula is weighted 42% U.S. dollar, 19% German mark, 13% each Japanese yen, British pound, and French franc on short-term *domestic* market rates in the five countries.
[e] Interest rate implied by total return on SDR basket components invested in 3-month *Euro-market* deposits.

submarket rate lending to member governments through various credit facilities. In this respect, the yield objectives of SDR holders are in conflict with the interest of debtor governments in low-cost loans.

It is evident that the future of the official unit as a reserve instrument will be limited if it continues to be weighted down by non-market characteristics. The notion of a single SDR interest rate impedes broadening of the SDR's reserve function by disregarding the market requirement for competitive interest rates differing according to maturity. The U.S. dollar's standing as the world's principal reserve currency reflects the breadth of U.S. money and capital markets. Ready availability of a wide range of SDR maturities at appropriate rates is needed to make the official unit a viable reserve asset. As commercial SDR markets develop, official SDR interest rates should be set increasingly by reference to the commercial rates. For the official SDR to become a more viable instrument, it is preferable that its interest rate on the SDR Account be separated from rates charged on drawings from IMF credit facilities. A rigid formula approach to setting the official remuneration rate clearly is not completely satisfactory.

The development of private financial markets for SDRs will continue regardless of the evolution of the official unit. *Voluntary* growth of central bank reserve holdings in SDRs is most likely to occur in the commercial markets. In that event, the role of the official SDR could be reduced mainly to the IMF's function in international liquidity creation. The developing countries have been the principal supporters of SDRs as a means of financing balance-of-payments deficits. Pressure continues for new SDR creation and for explicit linkage of their allocation to developing countries. Given the widespread perception of excessive world liquidity, however, the need for SDR creation for across-the-board balance-of-payments financing is questionable.

It is highly doubtful that the private SDR will replace the dollar and other key currencies. The dollar's weakness and negative real interest rates during the 1970s were the driving forces behind the search for alternative reserve assets including the SDR. The recent redirection of U.S. economic policy, including the restoration of positive real interest rates, lessens the competitive attraction of the SDR and other reserve currencies. Moreover, the SDR may well face competition from other currency baskets. Proposals to streamline the ECU (European Currency Unit) to the four principal European currencies, for example, are currently being discussed. This could make it a more attractive unit than the SDR in the eyes of those who are seeking an alternative to the dollar or find its large weight in the SDR unappealing.

Even if the SDR were to become a more prominent reserve instrument, there is no assurance that it would reduce exchange rate volatility as proponents of the SDR have contended. It is one thing to argue that the SDR offers relative stability for investors, but quite another to claim its use will lessen exchange rate volatility. Exchange rate fluctuations are shaped largely by fundamental forces such as current account balances, inflation rate differentials, and interest rate differentials as well as by international political developments. The addition of yet another currency unit will have no practical bearing on these fundamentals. Moreover, it remains to be seen whether portfolio holders will be less prone to switch into or out of SDR assets than is their practice in other currencies.

Thus, the significance of the emerging market for SDR assets lies in providing investors an additional means for coping with exchange risks rather than in moderating exchange rate fluctuations.

Statistical appendix

for key to data in tables see January 1981 issue.

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Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

The IMF's income derives principally from service and interest charges on credit extended to member governments, funded either through specially negotiated borrowings by the Fund from members in a strong financial position (e.g., from SAMA), or through the Fund's general Quota resources. Charges on credits provided from the special IMF borrowings are tailored specifically to cover the Fund's own costs on those funds. Terms on general resource credits are reset from time to time, and effective May 1, will be at a 6.25% annual rate in SDR terms. This rate is intended to cover both the IMF's administrative costs and to remunerate members whose currencies are provided to the borrowing countries. Importantly, it has been IMF policy to remunerate net creditors in the General Account at a rate identical to that paid to net creditors of the SDR Account, despite their different purposes. That remuneration rate will be 10.69% from May 1. The 6.25% rate on General Account borrowings, far below market rates, is attractive for borrowers, most of whom are developing countries in financial difficulty, but this low lending rate constrains the Fund's ability to pay competitive interest rates to creditors on both the General and SDR Accounts.

Effective exchange rates

Index numbers, March 1973=100. The index of the effective exchange rate for a currency is a measure of that currency's trade-weighted average appreciation or depreciation vis-à-vis the currencies of 15 other major countries. The exchange rates used in the construction of this index are the averages of daily noon spot exchange rates in New York for months and for weeks ending on dates shown. The trade weights used are based on 1976 bilateral trade in manufactures.

		United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
pre-June 1970 parities		118.5	94.9	79.3	116.2	91.6	97.5	110.9	95.9	98.2	88.3	97.8	97.9	98.1	102.2	92.2	98.4
Smithsonian central rates		107.0	101.3	88.7	116.0	95.4	96.1	108.3	97.0	99.1	91.6	98.0	96.0	96.3	100.5	91.7	98.1
1980																	
April		102.3	83.4	101.6	78.2	137.1	90.3	53.4	109.9	118.1	161.1	121.0	91.2	104.6	88.4	75.5	73.3
May		98.4	83.6	109.4	78.6	138.1	90.3	53.3	110.6	118.2	163.7	121.4	91.5	103.5	88.1	74.8	71.5
June		96.2	84.9	113.8	78.7	137.9	90.6	53.1	110.8	118.6	164.3	121.7	92.0	103.0	87.6	74.8	71.4
July		96.0	84.8	111.7	79.3	138.2	91.1	52.7	110.9	119.1	165.5	122.2	92.5	102.8	87.8	75.1	70.0
August		97.2	84.5	111.1	80.5	137.2	90.7	52.7	110.2	119.0	163.8	122.0	91.8	103.3	88.2	75.7	69.6
September		96.4	83.9	115.8	81.4	137.0	90.4	52.4	109.9	119.1	164.7	121.8	91.4	103.3	88.2	75.4	68.4
October		96.8	83.6	119.4	83.2	135.4	89.9	52.0	109.1	118.3	165.5	121.0	90.5	103.2	88.7	75.4	68.3
November		98.9	82.7	118.8	84.9	134.3	89.0	51.7	108.3	117.7	164.5	119.9	89.5	103.6	89.0	76.1	68.6
December		99.9	82.2	122.0	84.8	133.9	88.7	51.4	107.8	117.0	162.5	119.8	89.4	102.6	88.9	76.6	67.5
1981																	
January		99.4	82.5	126.7	87.8	132.8	88.3	51.0	107.2	116.2	160.9	119.4	88.0	101.7	88.8	76.6	66.8
February		102.3	82.5	127.3	87.7	131.7	87.1	50.3	106.3	115.0	159.1	118.8	86.4	103.1	90.2	77.4	65.9
March		102.5	83.1	125.5	85.1	133.9	87.0	49.8	106.0	114.7	160.5	120.0	86.1	103.7	90.1	78.1	65.9
	6	103.5	82.5	126.0	84.7	133.0	86.7	50.8	105.8	114.6	159.3	119.7	86.0	103.8	90.4	78.0	65.3
	13	102.6	82.7	126.6	84.8	134.0	86.9	50.1	105.8	114.6	160.0	119.8	86.0	103.8	89.9	77.8	65.7
	20	101.5	83.4	125.3	85.1	134.3	87.2	49.9	106.3	114.9	161.3	120.2	86.4	103.6	90.0	77.9	66.2
	27	102.2	83.6	124.5	85.7	134.1	87.4	48.7	106.2	115.0	161.2	120.4	86.3	103.4	90.2	78.4	66.2
April	3	102.7	83.7	123.4	85.3	134.4	87.1	48.7	106.2	114.7	160.9	120.2	86.1	104.1	90.4	78.5	66.2
	10	103.5	83.8	123.3	84.6	134.2	87.0	48.7	106.1	114.5	160.5	120.2	85.9	104.4	90.4	78.7	65.9
	17	104.7	83.4	122.4	84.5	133.7	86.7	48.6	106.0	114.5	160.3	120.1	85.9	104.5	90.6	79.1	65.8
	24	104.7	83.4	122.2	84.9	133.8	86.6	48.5	106.3	114.2	160.3	120.0	85.5	105.0	90.4	79.2	65.7

Real effective exchange rates

Index numbers, March 1973=100. The index of the real effective exchange rate is the index of the effective exchange rate adjusted for inflation differentials which are measured by wholesale prices of nonfood manufactures. Exchange rates and trade weights used in the construction of this index are the same as those used for effective exchange rate indices. Annual figures are averages of months.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
1977	100.9	99.2	93.3	101.6	102.7	96.5	92.3	99.9	104.0	105.6	109.5	97.3	99.0	105.2	91.8	101.3
1978	96.4	92.1	106.9	106.4	103.3	97.2	90.8	99.8	103.9	122.3	109.6	103.5	94.7	96.8	87.0	97.2
1979	96.5	92.2	95.7	118.8	104.1	99.2	90.6	97.3	100.4	115.7	108.4	101.5	89.6	99.5	85.9	109.3
1980	98.2	91.3	93.5	138.3	101.1	100.8	93.0	92.7	97.0	105.5	109.1	94.0	91.6	101.0	87.3	103.4
1980																
April	101.5	90.8	87.2	134.6	101.6	100.5	92.2	93.1	97.4	105.1	108.4	93.2	92.6	101.0	87.2	107.5
May	98.2	90.2	93.9	136.0	102.0	100.4	92.8	93.4	97.3	106.3	109.3	93.8	92.0	100.6	86.0	103.9
June	96.1	91.6	97.7	137.3	101.8	100.5	92.9	93.4	97.2	106.0	109.7	93.9	90.8	100.5	85.9	103.0
July	96.4	91.4	94.9	138.5	101.5	101.4	92.8	92.9	97.7	106.2	110.4	95.6	91.2	100.2	86.8	101.6
August	97.4	91.2	94.5	140.6	100.5	102.4	92.8	91.6	97.3	104.3	109.9	95.3	90.9	100.8	88.2	101.4
September	96.0	91.3	98.4	142.3	100.1	102.1	93.2	92.0	96.8	104.6	109.6	93.7	91.8	101.1	88.1	100.4
October	97.7	90.6	99.4	144.6	99.0	101.4	92.7	91.6	95.6	104.7	108.4	93.6	92.2	101.3	88.0	100.2
November	98.8	89.7	98.1	147.0	98.3	100.0	93.0	91.7	94.4	104.5	106.9	92.3	92.9	101.6	89.0	100.8
December	100.9	89.1	100.0	146.3	98.0	100.0	93.0	91.2	93.7	103.2	107.4	92.6	92.1	101.6	89.7	100.1
1981																
January	100.7	89.8	102.5	152.6	96.8	99.9	93.0	90.5	92.4	101.4	108.1	89.9	92.8	101.2	89.8	98.9
February	104.3	89.3	101.3	152.5	95.7	98.3	92.4	91.7	90.4	100.3	106.4	88.4	94.2	102.4	90.8	97.7
March	105.2	89.7	98.6	148.9	97.3	98.2	91.8	90.8	89.8	101.2	107.4	88.0	95.0	102.2	91.5	97.9

Euro-currency market size

based on foreign-currency liabilities and claims of banks in major European countries, the Bahamas, Bahrain, Cayman Islands, Panama, Canada, Japan, Hong Kong, and Singapore billions of dollars (rounded to nearest $5 billion), at end of period

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	
										Sep[r]	Dec[p]
Estimated size											
Gross	150	205	310	390	480	590	725	925	1 185	1,365	1 440
Liabilities to nonbanks	30	35	55	75	80	100	125	170	230	275	n.a.
Liabilities to central banks	15	25	40	60	70	85	110	120	165	170	n.a.
Liabilities to other banks[a]	105	145	215	255	330	405	490	635	800	920	n.a.
Net	85	110	160	215	250	310	380	485	600	705	775
Claims on nonbanks	35	45	65	100	115	150	195	245	295	355	n.a.
Claims on central banks and on banks outside market area[b]	35	45	75	95	115	135	155	195	245	275	n.a.
Conversions of Euro funds into domestic currencies by banks in market area[c]	15	20	20	20	20	25	30	45	60	75	n.a.
Euro-dollars as % of gross liabilities in all Euro-currencies	76	73	73	77	78	79	76	74	72	73	n.a.

a Includes unallocated liabilities
b Includes unallocated claims
c in European market area only
r revised
p preliminary

Euro-currency deposit rates

prime banks' bid rates in London, at or near end of month

	1977	1978	1979	1980					1981		
	Dec	Dec	Dec	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Euro-dollar:											
overnight	7.12	10.62	14.00	10.50	12.50	13.25	18.50	19.25	17.50	15.75	15.00
7-day fixed	6.31	10.62	14.00	10.62	12.50	13.50	18.50	19.75	17.50	15.50	14.37
one month	6.87	11.00	14.37	11.19	13.19	14.50	18.37	19.12	17.68	16.81	14.81
three months	7.19	11.69	14.44	12.25	13.81	15.37	18.06	17.62	17.50	16.62	14.81
six months	7.50	12.31	14.44	12.50	13.94	14.87	16.87	16.75	16.75	16.75	14.81
twelve months	7.67	12.00	12.87	12.50	13.69	14.12	15.50	14.87	15.75	16.06	14.81
Euro-mark:											
one month	2.19	3.19	8.50	8.62	8.87	8.81	9.69	8.87	9.31	14.87	12.31
three months	2.50	3.31	8.56	8.50	8.87	8.94	9.56	8.87	9.37	14.25	12.31
six months	2.81	3.69	8.56	8.31	8.87	8.81	9.31	8.87	9.37	13.37	12.00
twelve months	3.06	3.81	8.12	8.12	8.69	8.56	9.37	8.93	9.31	12.75	11.43
Euro-Swiss franc:											
one month	1.31	—.06	5.19	6.00	5.25	4.12	6.12	6.00	5.50	8.37	7.50
three months	1.37	0.00	5.75	5.87	5.75	5.44	6.12	6.00	6.00	8.37	7.62
six months	1.87	0.12	5.87	5.75	5.75	5.12	6.12	5.75	6.00	8.37	7.62
twelve months	2.25	0.62	5.56	5.50	5.62	5.37	6.19	5.50	6.12	7.62	7.62
Euro-sterling:											
one month	6.50	12.00	16.75	16.75	16.25	17.00	14.50	14.75	14.25	13.75	12.50
three months	6.62	12.62	16.75	16.62	15.87	16.75	14.62	14.75	13.75	12.75	12.50
six months	7.12	13.25	16.75	16.25	15.00	16.12	14.44	14.25	13.12	12.12	12.37
twelve months	7.37	13.00	15.25	15.12	14.37	15.00	14.00	14.00	13.12	12.00	12.18
Euro-French franc:											
one month	12.25	10.50	13.87	12.00	11.62	11.00	10.50	11.12	10.37	11.75	12.00
three months	13.25	9.87	14.00	12.12	12.06	11.31	11.37	11.75	10.87	12.87	12.37
six months	14.00	9.87	14.12	12.37	12.56	12.00	12.37	12.25	11.87	13.00	12.50
twelve months	13.25	10.25	13.75	12.62	12.81	12.62	13.00	12.87	12.62	13.00	13.00
Euro-yen:											
one month	0.62	—.69	7.62	11.62	12.50	10.00	10.25	9.12	8.25	8.62	7.75
three months	1.81	0.62	8.31	11.62	12.25	9.62	10.12	9.25	8.50	8.62	7.62
six months	2.75	1.87	8.62	11.12	11.50	9.12	10.12	9.62	8.50	8.37	7.75
twelve months	3.25	2.19	7.94	9.75	10.50	9.00	9.37	9.37	8.50	8.37	7.81

Euro-currency bank credits

publicly-announced in period, in millions of dollars

	1978	1979	1980	1981			Jan-Apr	
				Feb	Mar[r]	Apr[p]	1981	1980
Industrial countries	**28 952**	**27 248**	**39 450**	**2 410**	**1 439**	**2 743**	**11 879**	**10 041**
Australia	212	941	2 475	—	—	75	166	312
Canada	5 705	1 845	1 743	240	—	—	240	207
Denmark	2 242	1 205	1 720	—	49	546	770	456
Finland	550	92	1 040	175	—	—	240	350
France	1 914	2 955	1 745	1 245	360	—	1 980	186
Greece	508	1 009	1 333	—	10	400	610	658
Ireland	616	687	237	—	—	250	274	—
Italy	2 485	3 708	6 268	280	100	291	2 176	2 259
Norway	1 517	935	685	37	—	—	47	266
Spain	2 426	4 184	5 457	220	400	395	1 619	1 571
Sweden	1 872	1 263	1 720	—	—	—	1 430	233
United Kingdom	3 898	795	1 470	—	60	10	70	898
United States	1 206	2 348	6 719	187	150	230	917	525
Others[a]	3 801	5 281	6 838	26	310	546	1 340	2 120
Developing countries	**37 290**	**47 964**	**35 034**	**4 176**	**3 017**	**2 512**	**12 809**	**8 735**
Non-OPEC countries	26 669	35 225	23 535	3 097	2 484	2 383	10 416	5 355
Argentina	1 461	2 965	2 506	265	107	—	622	522
Brazil	5 634	6 278	4 158	320	940	50	1 607	659
Chile	1 045	867	1 322	245	100	115	655	288
Korea	2 651	3 258	1 917	267	—	258	653	1 072
Malaysia	858	1 168	—	450	50	—	545	—
Mexico	7 250	8 243	5 971	710	269	1 390	3 099	856
Morocco	605	499	420	—	—	300	440	—
Peru	—	596	480	100	332	—	432	145
Philippines	2 073	2 067	1 056	25	95	50	247	349
Taiwan	254	1 063	314	300	175	—	475	—
Other[b]	4 838	8 221	5 391	415	416	220	1 641	1 464
OPEC countries	10 621	12 739	11 499	1 079	533	129	2 393	3 380
Algeria	2 576	1 906	40	—	—	—	—	40
Indonesia	1 118	1 061	1 435	—	145	—	148	829
Nigeria	825	1 373	1 330	319	100	—	494	370
United Arab Emirates	726	401	101	—	—	—	—	58
Venezuela	2 054	6 830	6 715	580	213	47	1 350	1 433
Other	3 322	1 168	1 878	180	75	82	401	650
Communist countries	**3 767**	**7 325**	**2 809**	**210**	**400**	—	**860**	**580**
China	—	3 395	181	—	—	—	—	—
East Germany	642	796	303	—	—	—	250	—
Hungary	700	260	550	150	400	—	550	249
Poland	374	849	800	—	—	—	—	29
Other[c]	2 051	2 025	975	60	—	—	60	302
International organizations	**160**	**275**	**429**	**50**	—	—	**50**	**249**
TOTAL	**70 169**	**82 812**	**77 722**	**6 846**	**4 856**	**5 255**	**25 598**	**19 606**

[a] Includes multi-national organizations [b] Includes regional development organizations [c] Includes COMECON Institutions [p] preliminary
[r] revised

International bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980					1981		
	Dec	Dec	Dec	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
U S companies:											
U.S. dollar	7.95	8.55	10.13	10.60	10.73	11.27	11.46	11.76	11.94	12.17	12.46
Swiss franc	5.31	5.70	6.61	7.30	7.28	7.26	7.38	7.27	7.44	7.26	7.42
European companies:											
U.S. dollar	8.42	9.21	10.93	11.47	11.71	12.04	12.23	12.42	12.53	13.06	12.94
German mark	6.80	6.84	7.55	7.85	8.31	8.66	8.82	8.79	8.85	9.58	9.16
Governments:											
U.S. dollar	8.42	9.12	10.66	10.90	11.08	11.22	11.27	11.83	11.93	12.37	12.37

New international bond issues

new issues in period, in millions of dollars

	1978	*1979*	*1980*	*1981*			*Jan-Apr*	
				Feb	*Marr*	*Aprp*	*1981*	*1980*
By type:								
Euro-bonds, total	**14 125**	**18 726**	**23 945**	**1 406**	**1 756**	**1 121**	**7 042**	**5 700**
by category of borrower								
U.S. companies	1 122	2 872	4 102	552	130	270	1 367	849
Foreign companies	4 540	7 183	9 032	350	799	596	2 517	1 789
State enterprises	3 291	4 524	5 828	407	577	100	1 881	1 670
Governments	3 643	2 433	3 045	—	50	46	706	1 217
International organizations	1 529	1 714	1 947	97	200	109	571	175
by currency of denomination								
U.S. dollar	7 290	12 565	16 422	1 149	1 300	810	5 659	3 957
German mark	5 251	3 626	3 607	—	—	46	46	1 015
Dutch guilder	394	531	1 043	75	44	79	247	141
Canadian dollar	—	425	279	—	—	—	—	67
European unit of account	165	253	65	—	—	—	32	25
Other	1 025	1 326	2 538	182	412	186	1 058	495
Foreign bonds outside the United States, total	**14 359**	**17 749**	**14 521**	**886**	**1 195**	**767**	**3 973**	**4 878**
by category of borrower								
U.S. companies	245	217	307	118	93	—	221	194
Foreign companies	2 110	3 463	3 157	231	175	159	1 034	716
State enterprises	3 163	3 284	2 830	164	463	232	1 149	725
Governments	5 771	7 663	4 086	97	262	25	653	1 930
International organizations	3 070	3 122	4 141	276	202	351	916	3 313
by currency of denomination								
German mark	3 780	5 379	4 839	103	97	93	298	2 398
Swiss franc	5 698	9 777	7 617	551	728	547	2 752	2 072
Dutch guilder	385	75	259	—	87	—	132	31
Japanese yen	3 826	1 833	1 088	218	132	19	467	229
Other	671	685	718	14	151	108	324	148
Foreign bonds in the United States, total	**5 795**	**4 515**	**3 429**	**350**	**200**	**900**	**1 490**	**869**
by category of borrower								
Canadian entities	3 142	2 193	2 136	250	—	700	961	545
International organizations	459	1 100	550	—	—	—	—	250
Other	2 194	1 222	743	100	200	200	529	74
By country of borrower:								
Industrial countries	**24 964**	**31 886**	**32 716**	**2 076**	**2 373**	**2 170**	**10 202**	**9 131**
Australia	1 218	593	539	—	96	30	126	230
Austria	1 027	1 218	1 859	26	126	35	379	365
Canada	4 764	4 197	3 797	427	288	986	2 072	969
Denmark	1 017	752	1 125	—	100	26	126	285
Finland	952	699	392	—	59	46	110	196
France	1 286	2 106	2 809	183	313	39	1 074	720
Japan	3 467	5 775	5 309	350	493	217	1 592	1 419
Netherlands	250	832	1 585	76	—	17	142	231
Norway	2 751	1 954	892	—	27	35	102	473
Sweden	876	1 530	3 244	200	273	238	966	1 104
United Kingdom	1 365	1 181	1 733	—	30	175	305	278
United States	2 973	6 767	5 582	670	223	270	1 588	2 216
Developing countries	**4 227**	**3 093**	**2 485**	**193**	**376**	**158**	**766**	**578**
Non-OPEC countries	2 684	2 675	1 942	175	280	153	647	358
Brazil	843	930	349	—	—	—	—	—
Mexico	568	363	544	125	245	108	507	164
Philippines	170	175	70	30	—	—	30	—
OPEC countries	1 543	418	543	18	96	5	119	220
Algeria	721	208	—	—	—	—	—	—
Venezuela	588	55	398	—	96	—	96	120
Communist countries	**30**	**75**	**65**	—	—	—	**30**	—
Hungary	—	—	65	—	—	—	—	—
International organizations	**5 058**	**5 936**	**6 638**	**373**	**402**	**460**	**1 487**	**1 738**
TOTAL	**34 279**	**40 990**	**41 904**	**2 642**	**3 151**	**2 788**	**12 485**	**11 447**

Central bank discount rates

	1977	1978	1979	1980			1981	Current	
	end Dec	end Dec	end Dec	end Jun	end Sep	end Dec	end Mar	Apr 29 1981	effective since
United States	6.00	9.50	12.00	11.00	11.00	13.00	13.00	13.00	Dec 5, 80
Canada	7.50	10.75	14.00	11.83	11.20	17.36	16.69	17.40	Apr 23, 81
Japan	4.25	3.50	6.25	9.00	8.25	7.25	6.25	6.25	Mar 18, 81
United Kingdom	7.00	12.50	17.00	17.00	16.00	14.00	12.00	12.00	Mar 11, 81
Belgium	9.00	6.00	10.50	13.00	12.00	12.00	16.00	15.00	Apr 15, 81
France	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	3.00	3.00	6.00	7.50	7.50	7.50	7.50	7.50	May 2, 80
Italy	11.50	10.50	15.00	15.00	16.50	16.50	19.00	19.00	Mar 23, 81
Netherlands	4.50	6.50	9.50	9.50	8.50	8.00	9.00	9.00	Mar 3, 81
Austria	5.50	4.50	3.75	6.75	6.75	6.75	6.75	6.75	Mar 21, 80
Denmark	9.00	8.00	11.00	13.00	12.00	11.00	11.00	11.00	Oct 27, 80
Finland	8.25	7.25	8.50	9.25	9.25	9.25	9.25	9.25	Feb 1, 80
Ireland	6.75	11.85	16.40	16.85	13.50	12.75	12.75	13.35	Apr 10, 81
Norway	6.00	7.00	9.00	9.00	9.00	9.00	9.0	9.00	Nov 30, 79
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	Jul 26, 77
Sweden	8.00	6.50	9.00	10.00	10.00	10.00	12.00	12.00	Jan 20, 81
Switzerland	1.50	1.00	2.00	3.00	3.00	3.00	4.00	4.00	Feb 20, 81
Argentina	165.27	108.19	89.90	85.86	69.64	87.01	109.34	109.34	Mar 18, 81
Korea	14.00	14.50	14.50	19.50	17.50	15.50	15.50	15.50	Nov 11, 80
New Zealand	10.00	10.50	13.00	13.00	14.00	14.00	14.00	14.00	Jul, 80
Philippines	6.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	May 19, 78
Singapore	3.50	4.50	6.75	8.50	8.75	10.50	11.00	11.00	Jan 12, 81
South Africa	9.00	8.50	7.00	7.00	7.00	7.00	8.00	8.00	Feb 3, 81
Venezuela	7.00	7.50	11.00	10.00	10.00	13.00	13.00	12.00	Apr 25, 81

Day-to-day money rates

monthly averages

	1977	1978	1979	1980					1981		
	Dec	Dec	Dec	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
United States	6.56	10.03	13.78	9.61	10.87	12.81	15.85	18.90	19.08	15.93	14.70
Canada	6.84	9.44	13.83	9.86	9.82	10.70	11.05	15.61	16.93	16.58	16.90
Japan	5.01	4.57	8.02	12.11	11.40	11.00	9.61	9.49	8.90	8.54	8.24
Australia	9.96	8.40	7.84	9.63	9.81	8.96	9.84	9.51	9.69	10.35	11.11
United Kingdom	4.81	10.00	14.87	14.87	14.90	15.00	12.25	13.00	12.19	12.19	11.06
Belgium	7.48	6.73	10.65	10.01	9.64	9.60	10.16	9.68	10.32	9.18	10.13
France	9.30	6.67	12.17	11.32	11.37	11.22	10.74	10.87	10.73	10.91	11.72
Germany	3.24	3.61	9.15	8.95	9.28	8.98	8.82	9.13	9.13	10.57	11.25
Italy	11.37	11.00	16.00	16.87	16.87	17.87	17.62	17.50	17.37	17.37	19.62
Netherlands	5.27	10.00	15.67	10.11	9.75	9.30	9.00	8.37	8.95	9.12	9.75
Austria	9.25	5.37	8.50	10.25	11.00	11.00	11.50	11.50	9.50	9.00	11.00
Finland	22.99	9.29	13.53	12.50	12.50	12.50	12.50	12.50	12.50	12.50	11.72
Ireland	8.00	12.12	16.88	13.75	13.62	13.25	13.38	13.31	13.44	13.38	13.12
Spain	7.22	16.75	9.61	12.57	13.16	14.38	15.24	16.74	15.89	12.50	11.98
Sweden	8.91	6.26	11.99	12.90	11.95	13.00	11.80	11.41	12.75	16.97	15.40
Switzerland	0.85	0.00	1.25	6.50	2.00	0.87	3.37	5.75	3.75	3.50	4.50
Argentina	n.a.	n.a.	78.22	52.89	51.36	54.58	58.04	70.84	74.81	92.07	133.08
Brazil	28.44	35.64	32.28	31.80	35.76	38.28	40.56	49.68	51.60	54.48	56.64
Hong Kong	4.87	9.67	14.19	8.75	8.31	10.87	13.87	14.05	14.18	18.00	16.85
Korea	14.40	15.00	15.00	19.20	17.22	17.22	14.82	14.82	14.82	14.82	14.82
Philippines	14.44	13.22	16.25	6.47	9.71	9.26	13.10	15.70	13.66	14.43	17.34
Singapore	3.59	4.98	10.17	8.97	10.75	14.53	11.06	10.23	11.77	12.73	9.73
South Africa	7.65	7.11	3.81	4.15	4.35	4.47	4.99	5.60	6.22	7.06	7.26
Euro-dollars	6.94	10.80	14.41	9.86	10.96	13.18	16.15	19.22	19.05	16.14	14.57

Treasury bill rates

bond-equivalent yields, at or near end of month

	1977	1978	1979	1980					1981		
	Dec	Dec	Dec	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
United States	6.33	9.42	12.39	10.70	11.09	13.07	14.84	14.87	15.83	14.80	13.55
Canada	7.17	10.46	13.66	10.49	10.95	11.91	13.70	17.01	16.86	16.83	16.44
Japan	4.15	3.39	5.68	6.82	6.44	6.44	5.93	5.93	5.93	5.93	5.93
Australia	8.35	8.35	9.31	10.53	10.56	10.95	11.47	12.17	12.42	12.68	12.72
United Kingdom	6.42	12.01	16.45	15.00	14.37	14.44	13.38	13.45	13.45	12.30	12.24
Belgium	9.25	9.25	14.40	12.35	12.35	12.10	12.75	12.75	12.10	13.25	15.00
Ireland	6.74	11.83	16.37	13.47	13.43	12.72	12.78	12.84	12.83	12.84	12.70
Italy	12.81	12.81	15.62	16.12	16.00	16.87	16.87	16.87	17.69	17.69	19.84
Netherlands	6.00	9.50	12.75	10.25	9.25	8.85	8.75	8.00	8.75	8.75	9.25
Sweden	9.21	5.84	9.74	12.84	12.90	12.90	12.90	12.87	16.85	16.85	15.73
Argentina	109.06	82.55	71.04	48.60	51.03	58.31	60.73	66.19	69.10	90.06	107.97
Brazil	38.08	41.21	27.84	42.66	43.70	50.18	66.34	76.84	78.24	73.58	70.46
Korea	16.88	17.01	19.53	22.01	19.50	19.50	16.35	16.35	18.98	18.98	18.98
Mexico	n.a.	12.75	17.89	21.36	23.42	24.73	25.81	27.73	28.87	n.a.	n.a.
New Zealand	7.50	10.50	11.25	11.25	11.25	11.25	11.25	11.25	11.50	11.25	11.25
Philippines	10.04	12.08	12.63	12.66	12.67	12.70	12.75	12.74	12.65	12.65	12.69
Singapore	3.17	4.01	6.18	6.89	6.99	6.98	6.86	6.77	6.86	6.84	6.60
South Africa	8.17	7.61	4.30	4.64	4.84	5.13	5.71	6.31	6.89	7.59	7.82

Representative money-market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money-market instruments, other than Treasury bills, at or near end of month

	1977	1978	1979	1980					1981		
	Dec	Dec	Dec	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
United States	6.84	10.57	13.70	10.91	12.24	14.24	17.15	17.62	16.67	15.48	14.25
Canada	7.25	10.62	14.15	10.75	11.10	12.50	14.10	17.50	16.95	16.85	17.05
Japan	5.89	4.64	8.01	10.95	11.48	9.57	9.80	9.80	8.32	8.37	7.34
Australia	9.75	9.10	10.30	12.40	12.00	11.70	11.75	13.00	13.25	14.00	15.10
United Kingdom	6.50	12.50	17.00	16.69	15.87	16.62	14.50	14.75	13.19	12.50	12.50
Belgium	9.50	9.25	14.45	12.60	12.60	12.45	13.00	13.10	12.35	13.00	14.00
France	9.19	6.44	12.62	11.62	12.31	11.31	11.44	11.56	11.25	13.50	12.75
Germany	3.60	3.70	8.70	8.90	9.10	9.20	9.45	10.20	9.45	14.50	13.30
Ireland	6.75	13.00	18.12	14.50	13.75	13.37	13.75	13.62	13.87	14.78	14.00
Italy	11.75	11.37	17.12	17.25	18.75	17.75	17.37	17.37	17.37	17.50	19.75
Netherlands	6.25	10.50	13.00	10.75	10.37	9.25	10.00	9.37	9.50	11.25	10.37
Spain	12.06	22.80	13.20	14.60	14.40	15.30	16.00	17.40	17.40	15.00	13.20
Switzerland	2.02	0.50	6.12	6.12	5.87	5.62	6.12	7.50	6.00	8.50	9.37
Hong Kong	5.73	11.82	14.37	9.25	10.44	12.56	15.87	17.69	15.53	16.86	16.27
Korea	16.88	17.01	19.53	22.01	19.27	19.27	16.35	16.35	16.35	16.35	16.35
New Zealand	11.87	12.00	16.00	13.40	14.00	14.25	14.10	14.25	14.35	14.80	15.60
Philippines	11.96	11.48	10.41	10.92	10.97	11.96	13.15	15.01	15.98	16.86	16.63
Singapore	4.81	7.38	10.12	9.50	11.62	13.62	14.12	14.12	14.25	13.69	11.69
South Africa	9.00	7.85	4.72	4.93	5.00	5.05	6.07	7.12	8.42	9.73	9.89

Commercial bank deposit rates

at or near end of month

	1977	1978	1979	1980					1981		
	Dec	Dec	Dec	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
United States	6.80	10.90	13.55	11.55	12.25	14.25	17.07	16.25	16.00	14.75	13.50
Canada	7.25	10.45	14.05	10.75	10.65	12.40	13.95	17.00	16.90	17.15	16.85
Japan	3.25	2.50	8.37	11.00	11.30	9.50	9.90	9.00	8.72	8.25	7.25
Australia	9.50	8.50	10.25	12.03	11.33	10.95	11.21	12.71	12.85	14.14	14.95
United Kingdom	6.37	12.25	16.81	16.75	15.94	16.75	14.44	14.87	13.44	12.37	12.44
Belgium	9.50	9.87	14.50	12.63	12.50	12.13	13.00	12.63	12.13	13.50	15.50
France	9.00	6.50	12.50	11.62	11.75	11.00	11.50	11.25	11.25	12.00	13.00
Germany	3.40	3.50	7.75	8.40	8.40	8.40	8.75	8.00	8.70	13.50	12.50
Italy	17.00	12.50	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25
Netherlands	7.00	11.62	13.50	10.62	10.25	9.75	10.25	9.50	9.62	11.50	10.50
Austria	9.00	6.75	8.50	11.37	11.62	11.50	11.50	11.25	10.00	9.75	11.50
Denmark	8.00	7.00	10.00	12.00	11.00	10.00	10.00	10.00	10.00	10.00	10.00
Finland	4.25	3.25	4.25	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Ireland	6.87	12.75	17.87	14.00	13.87	13.25	13.75	13.62	13.50	14.62	13.50
Norway	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Spain	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Sweden	7.75	6.25	8.75	9.75	9.75	9.75	9.75	9.75	11.75	11.25	11.25
Switzerland	1.12	0.12	4.75	5.00	5.25	5.62	6.12	7.50	6.12	8.50	7.25
Argentina	n.a.	86.63	72.64	53.05	50.61	59.00	62.00	72.00	76.50	97.00	130.00
Brazil	39.60	46.80	45.00	47.40	49.56	54.48	61.20	69.48	72.00	72.84	73.44
Hong Kong	1.75	4.50	9.25	6.00	6.00	9.00	13.00	13.00	13.00	13.25	13.00
Korea	13.20	15.00	15.00	19.20	17.22	17.22	14.82	14.82	14.82	14.82	14.82
Mexico	11.00	12.00	16.75	18.98	20.74	21.74	23.25	26.15	27.13	n.a.	n.a.
New Zealand	11.00	12.00	15.90	13.30	13.05	13.50	13.50	13.50	13.75	14.00	14.50
Philippines	8.50	8.50	10.50	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Singapore	5.31	7.31	10.31	9.38	11.44	13.00	13.50	13.19	12.62	12.19	10.75
South Africa	8.70	7.30	4.82	4.77	4.90	5.10	6.62	7.87	9.25	10.75	10.27
Venezuela	7.00	7.25	15.00	12.00	12.00	12.00	12.00	16.00	16.00	16.00	14.00

Commercial bank lending rates to prime borrowers

at or near end of month

	1977	1978	1979	1980					1981		
	Dec	Dec	Dec	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
United States	7.75	11.75	15.25	11.50	13.00	14.50	17.75	21.50	20.00	19.00	17.00
Canada	8.25	11.50	15.00	12.50	12.25	12.75	14.50	18.25	18.25	18.25	17.75
Japan	5.47	4.50	6.51	9.27	8.99	8.82	8.58	8.16	7.85	7.85	7.85
Australia	11.50	11.00	10.75	12.50	12.50	12.50	12.50	13.50	13.50	13.50	14.25
United Kingdom	8.00	13.50	18.00	17.50	17.50	17.50	15.00	15.00	15.00	15.00	13.00
Belgium	10.00	10.00	15.25	15.75	15.75	15.75	15.75	15.75	15.25	15.25	16.50
France	11.35	10.95	13.65	13.40	13.40	13.40	13.40	13.40	13.40	14.15	14.90
Germany	6.00	5.50	9.75	11.50	11.50	11.50	11.50	11.50	11.50	12.00	13.75
Italy	16.00	15.00	19.50	19.50	19.50	19.50	21.00	20.50	20.50	21.00	22.50
Netherlands	7.00	12.00	15.00	11.75	11.25	10.25	10.75	10.75	10.50	10.75	11.25
Austria	9.75	8.75	8.50	11.00	12.00	12.00	12.25	12.50	12.50	12.50	12.50
Denmark	12.50	10.00	13.75	15.75	14.75	13.75	13.75	13.75	13.75	13.75	13.75
Finland	8.85	7.87	9.06	9.83	9.84	9.83	9.82	9.83	9.84	n.a.	n.a.
Ireland	8.25	13.75	16.00	15.50	15.50	14.50	14.50	14.50	14.50	14.50	14.50
Norway	8.33	11.00	11.00	11.00	12.50	12.50	12.50	12.50	12.50	12.50	12.50
Spain	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00
Sweden	10.25	8.50	10.75	11.75	11.75	11.75	11.75	11.75	13.75	13.75	13.75
Switzerland	5.75	5.00	5.00	5.75	5.75	5.75	5.75	5.75	5.75	6.00	6.50
Argentina	152.08	86.75	80.00	58.50	53.00	60.00	66.00	77.00	81.00	114.00	146.00
Brazil	52.05	61.70	57.00	57.00	57.00	57.00	88.00	88.00	133.75	133.75	133.75
Hong Kong	4.75	8.75	14.50	10.00	10.50	13.00	17.00	17.00	17.00	17.00	17.00
Korea	15.00	18.50	18.50	23.50	21.50	21.50	19.50	19.50	19.50	19.50	19.50
Mexico	17.00	17.50	19.00	22.82	23.51	24.42	24.77	26.25	27.46	27.98	n.a.
New Zealand	8.50	9.75	11.75	12.75	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Philippines	14.00	14.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
Singapore	7.02	7.65	9.50	10.95	11.30	12.60	13.55	13.60	14.30	14.30	13.68
South Africa	12.50	11.50	9.50	9.50	9.50	9.50	9.50	9.50	10.00	11.00	11.50
Venezuela	9.50	10.25	13.00	12.00	12.00	12.00	12.00	15.00	15.00	15.00	13.00

Domestic government bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980					1981		
	Dec	Dec	Dec	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
United States	7.97	9.00	10.20	11.46	11.90	12.33	12.25	11.46	12.76	13.16	13.21
Canada	8.77	9.68	11.32	12.42	12.98	13.22	13.01	12.69	12.96	13.38	13.48
Japan	6.40	6.40	8.63	8.77	8.92	8.84	9.26	9.04	8.84	8.89	8.67
Australia	9.50	8.90	10.45	11.85	12.00	12.40	12.60	13.00	13.10	13.10	13.10
United Kingdom	10.53	12.75	13.83	13.27	12.69	12.52	12.65	13.05	13.25	13.36	12.86
Belgium	8.76	8.80	11.13	12.08	12.43	12.46	12.61	13.04	13.19	13.44	13.57
France	11.07	9.94	12.59	13.46	13.85	14.27	14.24	14.31	14.58	15.05	14.98
Germany	5.52	6.65	7.91	7.95	8.24	8.55	8.59	9.19	9.07	10.38	9.93
Italy	10.82	10.89	11.28	12.00	12.12	12.53	12.42	12.12	12.44	12.88	14.46
Netherlands	8.11	8.48	9.29	10.08	10.25	10.20	10.46	10.48	10.43	10.96	11.38
Austria	9.00	7.91	8.20	9.62	9.61	9.90	10.11	9.62	9.80	10.06	n.a.
Denmark	16.83	17.27	18.28	20.71	20.29	19.24	19.40	19.62	18.56	18.90	19.12
Finland	10.25	9.19	9.58	10.52	10.35	10.48	10.43	10.42	10.92	10.92	10.96
Ireland	11.30	13.44	16.64	14.49	14.57	14.77	14.91	15.63	16.22	n.a.	16.12
Norway	8.37	8.19	10.04	10.73	n.a.	10.40	10.44	10.44	11.70	11.50	11.57
Sweden	9.84	10.09	11.22	11.46	12.63	12.68	12.71	12.61	n.a.	n.a.	n.a.
Switzerland	3.75	3.03	4.20	4.87	4.85	4.69	4.67	4.63	4.79	5.20	5.40
Argentina	181.65	112.18	47.94	42.24	40.46	38.21	101.38	36.84	34.97	42.99	66.43
New Zealand	10.00	10.02	12.98	13.25	12.98	12.96	12.96	12.99	12.81	12.97	n.a.
Philippines	13.40	13.40	13.20	13.40	13.40	13.40	13.40	13.40	13.40	13.40	13.40
South Africa	10.75	9.85	9.44	10.05	10.62	11.10	11.75	11.80	12.67	12.77	12.77
Venezuela	7.24	7.24	7.29	7.37	7.40	7.40	7.43	7.39	7.44	7.40	7.30

Domestic corporate bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980					1981		
	Dec	Dec	Dec	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
United States	8.30	9.25	10.75	12.50	12.88	13.38	13.38	13.00	13.63	14.13	14.00
Canada	9.71	10.34	12.07	13.35	13.74	13.95	13.72	13.62	13.84	14.34	14.41
Japan	6.68	6.94	8.34	8.24	8.44	8.48	8.60	8.60	8.49	8.25	8.15
Australia	11.00	10.25	11.65	13.25	13.35	13.75	14.00	14.25	14.25	14.10	14.25
United Kingdom	11.88	13.53	14.96	13.90	13.78	13.61	13.63	14.21	14.20	14.14	14.35
Belgium	9.85	9.58	11.93	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
France	12.09	10.27	12.92	13.86	14.03	14.69	14.83	15.23	14.62	15.13	15.39
Germany	5.92	6.80	8.20	8.10	8.40	8.80	9.30	9.50	9.50	10.00	10.90
Italy	10.71	10.12	10.22	13.73	13.31	12.64	12.65	12.99	12.80	13.05	16.82
Netherlands	7.90	8.62	9.95	10.33	10.49	10.48	10.33	10.71	10.46	10.77	11.21
Norway	8.59	8.37	10.53	10.70	n.a.	10.55	11.24	11.24	11.75	12.07	12.36
Spain	11.58	12.17	11.77	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweden	9.83	10.03	10.21	11.90	11.94	11.99	12.10	11.95	13.37	13.46	13.56
Switzerland	4.96	4.85	5.53	5.76	5.83	5.71	5.78	5.63	5.78	5.93	6.08
Korea	19.60	24.00	32.50	28.70	26.00	26.00	23.50	26.30	26.30	24.70	23.00
Mexico	17.56	20.37	21.99	26.26	26.13	26.12	27.55	28.03	28.33	30.90	n.a.
Venezuela	10.39	12.43	14.55	12.41	12.40	13.55	14.78	16.15	16.65	16.20	16.00

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World Financial Markets

Morgan Guaranty Trust Company of New York

May 1981

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Table 1

Exchange rate changes from April 15, 1981 to May 21, 1981

percent vis-à-vis U.S. dollar and on a trade-weighted average basis

	vis-à-vis U.S. dollar	*trade-weighted average basis*
U.S. dollar	—	2.9
Canadian dollar	—0.4	0.2
Japanese yen	—2.6	—0.5
British pound	—3.7	0.6
Belgian franc	—5.7	0.0
Dutch guilder	—5.7	—1.0
French franc	—7.7	—3.1
German mark	—5.7	—1.0
Italian lira	—5.8	—0.8
Swiss franc	—3.5	1.7

Foreign exchange market developments

Exchange markets in the last few weeks have been dominated by two major developments: first, the continued strengthening of the dollar, and second, the weakening of the French franc, which has pulled down the other EMS currencies (see Table 1). Since mid-April the dollar has risen against all major currencies and it is up by almost 3% on a trade-weighted basis. The dollar's sustained climb brought it in mid-May to a level which was effectively 1% *above* its Smithsonian level of December 18, 1971 (see chart). In October 1978, when it reached its all-time low, the dollar had been 11% below its Smithsonian level. As a result, the nominal, trade-weighted depreciation of the dollar over nearly ten years has been completely reversed.

As has been pointed out in previous issues of this publication, several factors have contributed to the dollar's sharp appreciation. One factor has been the broad-based strength of the U.S. current account position relative to that of the other major industrial countries. Unlike Germany and Japan, the United States has not had to rely exclusively on increases in its surplus on manufactures trade to offset rising oil import bills. Rather, increased oil imports were outweighed by improvements in net trade in agriculture and raw materials and net invisibles, as well as in manufactures trade. Even this year, despite considerable growth in the U.S. economy, a sizable current account surplus is expected, compared to a deficit of about $16 billion for Germany and a balanced position for Japan.

Moreover, the longer-term outlook for the U.S. current account remains reasonably sanguine. Although the dollar's sharp 13% real appreciation since last autumn is likely to contribute to a significant narrowing of the manufactures surplus next year, there is clearly potential for further reductions in U.S. oil import volume, given the vast energy resources of the United States and the scope for additional conservation. Also, the United States stands to benefit from an increased surplus on agricultural and raw materials trade and on net invisibles.

A second factor supporting the dollar has been U.S. monetary policy. In this regard, the change in U.S. monetary policy since October 1979 has proved to be an important milestone. It not only marks the introduction of new operating procedures by the Federal Reserve to

Effective dollar exchange rates
monthly averages except latest plotting
March 1973=100

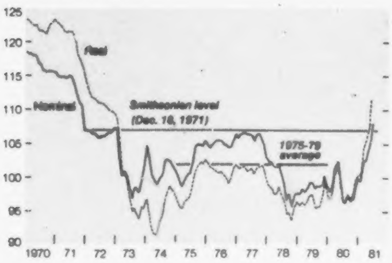


Table 2

Bank financing for the non-OPEC LDCs

annual rates

	Volume of publicized new Euro-currency bank credits[1] *in $ billions*	*Growth of total bank claims outstanding*[2] *in $ billions*	*% change*
1979	29	36	30
1980	23	38	24
1st half	18	30	20
2nd half	28	46	29
1981			
Jan-Apr	30	n.a.	n.a.

[1] Excluding refinancing, renegotiation, or restructuring of existing debt.
[2] BIS reporting banks.

control money supply growth, but the end of the era of cheap money, in which real interest rates were low or negative. U.S. interest rates now are close to their record levels of last December, and any easing of interest rates is contingent on a slowing of the growth of the U.S. monetary aggregates.

A third factor behind the dollar's rebound has been a general restoration of confidence in U.S. economic policies. This encompasses not only the adoption of more realistic energy and monetary policies over the past few years, but also the initiatives undertaken by the Reagan Administration to reprivatize the U.S. economy. They include actions to restore economic incentives to the private sector through tax reductions and the dismantling of excessive government regulations, as well as steps to slow the growth of federal government expenditures. These policies have raised expectations for improved U.S. productivity performance over the longer run, which together with restrictive monetary and fiscal policies, should eventually bring a reduction of U.S. inflation.

Finally, in contrast to the U.S. situation, there are growing uncertainties about the political and economic environment in Western Europe. Last year, the combined current account deficit of the Western European countries amounted to about $60 billion and only a modest narrowing is anticipated for this year, despite widespread economic recession and mounting unemployment. Faced with this situation, the authorities in these countries have been forced to support their currencies by maintaining relatively high interest rates, hindering the prospects for a quick recovery. In addition, there are major political uncertainties in the wake of the recent victory of the Socialist Party in France. As a result, the future direction of economic policies in France is likely to turn more stimulatory, raising new questions about the position of the French franc in the EMS and the European exchange rate structure in general.

Adjustment to the second oil shock

Commercial bank lending to the non-OPEC developing countries has risen substantially so far this year. New publicly announced medium-term Euro-currency credits to these countries during the first four months of 1981 amounted to $10 billion, almost double their level in the same period a year ago. For the whole of last year, by contrast, the volume of these new credits fell by 20% from 1979. While these figures are on a gross basis and do not allow for repayment of bank loans, net flows of bank credit to the LDCs probably would show a similar acceleration, judging from the quarterly trend of such flows in 1980. Recently released BIS data, which are on a net basis and include short-term credits, indicate that although the growth of bank lending to the non-OPEC LDCs slowed to 24% last year from 30% in 1979, there was a marked acceleration in the second half of 1980 versus the first half (see Table 2). This trend is believed to have continued during the past few months.

There are a number of favorable developments in the international payments picture. Oil prices are stabilizing, increasing the likelihood of a significant reduction in the OPEC current account surplus next year. Economic policies in some major developing countries are producing significant improvements in their non-oil trade balances. Furthermore, the recovery in international lending to these countries is being supported by the growing participation

Table 3

Adjustment to two oil shocks: economic growth, oil demand and supply[1]

	Total change between:	
	1973 & 1975	*1979 & 1981*
Industrial countries incl. U.S.		
Real GNP, %	0.6	2.7
Oil consumption, mbpd	—3.1	—4.5
Oil production, mbpd	—1.1	0.2
Net oil imports[2]*, mbpd*	—3.3	—5.6
United States		
Real GNP, %	—2.2	3.0
Oil consumption, mbpd	—1.0	—2.2
Oil production, mbpd	—0.9	0.1
Net oil imports[2,3]*, mbpd*	—0.3	— 2.4
Non-OPEC LDCs		
Real GDP, %	11.8	7.5
Oil consumption, mbpd	0.2	0.1
Oil production, mbpd	0.5	1.0
Net oil imports[2]*, mbpd*	—0.3	—0.9
OPEC		
Oil export volume, mbpd	—4.0	—6.4

[1] Data include natural gas liquids.
[2] Includes stock changes.
[3] BOP basis.

of Arab financial institutions in syndicated Euro-loans. In addition, over the past year or so the International Monetary Fund has become much more actively involved in lending to the developing countries, and its recent conclusion of new borrowing arrangements with Saudi Arabia and other countries should have a constructive effect on the climate for balance-of-payments financing in general.

Despite these encouraging developments the international payments outlook is not problem-free. A number of individual countries still have serious payments deficits and the external debt burden and annual financing requirements of the LDCs in general remain very large. The present comfortable oil demand-supply situation could be upset again by political developments in the Middle East. Difficulties in reducing inflation in the industrial countries are keeping interest rates at very high levels, aggravating the LDCs' balance of payments.

In light of these factors, the LDCs need to persist with their adjustment efforts and contain the size of their external deficits. The IMF should use its increased lending capacity to help promote adjustment and not waver in its application of conditionality. Similarly, the industrial countries cannot afford to relax their oil conservation efforts and must avoid a rise in oil consumption, which could create renewed upward pressures on oil prices. Also, the industrial countries, especially the United States, must succeed in their fight against inflation so as to bring about a sustainable reduction of their interest rate structure and to establish conditions for stronger growth.

Declining OPEC surplus

The OPEC current account surplus peaked at over $110 billion last year and has begun to decline. Unless upset by major new disruptions in oil supplies, it is projected to fall to just below $80 billion next year. A major reason behind this development is the sharp decline in oil consumption in the industrial countries and, to a lesser extent, the steady rise in non-OPEC oil supplies. These factors, together with Saudi Arabia's high oil production and lower oil price, have put downward pressure on spot oil prices and on some of the premiums and higher contract prices charged by other oil exporters.

Oil consumption in the industrial world fell by 7% in 1980 and should be down again this year by over 4%, for a total reduction of 4½ million bpd between 1979 and 1981. The present decline is 45% greater than that which occurred after the first oil shock, despite much better economic performance in the industrial countries (see Table 3). Allowing for a small increase in their oil production, versus a drop of over 1 million bpd in 1974-75, net oil imports of the industrial countries are likely to decline by more than 5½ million bpd this year from 1979.

The United States is responsible for half of the 1980-81 drop in industrial countries' oil consumption and for over 40% of the decline in their net oil imports. This greater-than-expected contraction is mainly the result of higher oil prices in the United States, including the effect of the decontrol of domestic crude oil, rather than of slower economic activity. U.S. GNP should be up some 3% in real terms this year from 1979, compared with a 2.2% decline between 1973 and 1975.

An additional factor is the steady rise in oil production in the non-OPEC LDCs, particularly Mexico. This year, oil production in these countries may be 1 million bpd higher than in 1979, leading to an almost

Table 4

Oil demand and supply in the non-Communist world[1]

millions of bpd

	1979	*1980*	*1981*
Demand, excluding OPEC	***50.9***	***47.6***	***45.5***
United States	18.5	17.1	16.3
Japan	5.5	5.1	4.9
Europe	14.6	13.6	13.0
Other industrial	3.1	3.0	3.0
Non-OPEC LDCs	8.1	8.2	8.2
Stock changes	1.1	0.6	0.1
Non-OPEC production	***21.5***	***22.2***	***22.5***
Industrial countries[2]	16.4	16.5	16.4
Mexico	1.6	2.1	2.5
Other developing countries	3.5	3.6	3.6
OPEC exports	***29.4***	***25.4***	***23.0***
Iran and Iraq	5.8	3.5	1.8-2.7
Kuwait	2.6	1.7	1.2
Libya	2.0	1.8	1.6
Others	9.5	8.6	8.4
Subtotal	19.9	15.6	13.0-13.9
Saudi Arabia	9.5	9.8	9.1-10.0

[1] Data include natural gas liquids.
[2] Includes net exports to the West from Communist countries.

Table 5

The OPEC current account 1980-1982

billions of dollars

	1980	*1981*	*1982*
Exports of goods and services[1]	301	329	351
of which: oil revenues	274	298	315
Imports of goods and services[1]	—199	—234	—285
Investment income, net	9	10	12
Current account	111	105	78
Net official transfers	—8	—9	—9
Current account after transfers	103	96	69
Net external assets	327	423	492

[1] Excludes investment income but includes private transfers.

equal reduction in their net oil imports. The projected decline of almost 6½ million bpd in the combined net oil imports of the industrial countries and the non-OPEC LDCs between 1979 and 1981 will more than offset the reduction in Iranian and Iraqi oil exports during this period. Also, it has led to oil production cutbacks in Kuwait, Libya, and some other OPEC countries (see Table 4).

Nevertheless, in spite of sharply lower oil consumption and imports, OPEC oil prices would not have stabilized had it not been for the high level of oil production from Saudi Arabia. Having maintained its output during most of 1979 and in 1980 at 9.5 million bpd, or 1 million bpd above is traditional ceiling, Saudi Arabia raised its production to over 10 million bpd last fall, at the onset of the Iraq-Iran war. These additional oil supplies and their timely allocation to the countries most affected by the war had a major stabilizing influence on oil markets. Also assisting in this regard was a greater-than-expected drawdown of the high oil stocks held by the major industrial countries.

During the first four months of 1981 the effective OPEC oil price averaged $35.50 per barrel. In light of present oil demand-supply conditions, it is likely that the price will change little during the rest of 1981, resulting in an annual average of around $36 per barrel. This represents a rise of 13½% from the 1980 average of under $32, a considerable slowing from the 60% and 53% increases of 1980 and 1979, respectively. Still, after adjustment for inflation (as measured by changes in the wholesale price index of manufactures in industrial countries in dollar terms), this year's oil price assumption implies a real increase for OPEC of over 10%. This relatively large real increase in dollar terms, which reflects mainly the strength of the dollar in foreign exchange markets rather than a significant reduction of inflation in industrial countries, should provide an added impetus for oil price moderation to OPEC members.

Next year, barring new oil supply disruptions, oil market conditions should remain easy, preventing an increase in oil prices in real terms. Oil consumption in the major industrial countries could decline again, even if economic growth accelerates. This would contrast with the experience during the economic recovery of 1976, when the preceding two years' drop in consumption was reversed. It reflects, in part, the outlook for a more modest recovery this time, but also the higher domestic oil prices in the United States because of decontrol of oil prices, and in other countries because of the stronger dollar. Oil consumption outside the major industrial countries could pick up next year, but such an increase and a likely decline in net Communist-country exports should be offset by higher non-OPEC oil production. As a result, OPEC oil exports in 1982 may remain at this year's depressed level of 23 million bpd. These trends, plus Saudi Arabia's increasing influence over OPEC decisions and the recent strength of the dollar, should contribute to only modest oil price rises next year. Assuming a rate of inflation of about 6% in dollar terms, the average OPEC oil price may be around $38 per barrel in 1982.

The prospect for relative oil price stability in the next year and a half suggests that the OPEC current account surplus may fall from a peak of $111 billion last year to $105 billion in 1981, and drop to less than $80 billion in 1982 (all data are before official transfers, see Table 5). This would bring OPEC net external assets to nearly $500 billion by the

Table 6

World current account balances before official transfers

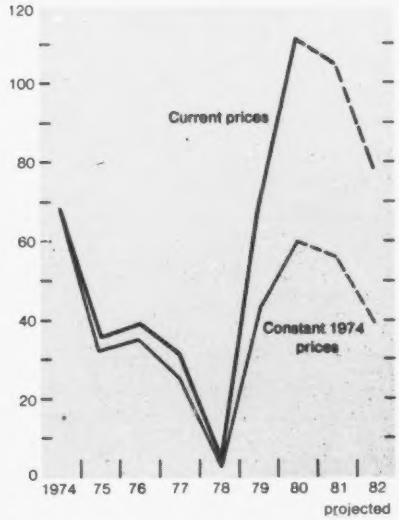
billions of dollars

	1980	*1981*	*1982*
OPEC	111	105	78
Industrial countries	—46	—35	—21
Major[1]	—22	—2	10
Others	—24	—33	—32
Non-OPEC LDCs	—76	—85	—75
Net oil importers	—67	—73	—65
Net oil exporters	—9	—12	—10
Statistical discrepancy[2]	9	15	18

[1] United States, Canada, Japan, France, Germany, Italy, United Kingdom, Belgium-Luxembourg, Netherlands, and Switzerland.
[2] Includes Comecon and China.

OPEC current account

before official transfers in billions of dollars



end of next year, triple the end-1978 level.

The projected decline in the OPEC surplus is less rapid than after the first oil shock (see chart) because of the slower rate of increase in OPEC imports of goods and services. Import volume, excluding outflows of investment income, grew by less than 14% last year and may be up by another 15%-16% per year in 1981 and 1982, compared with an average annual rate of over 38% during the first three years after the first oil shock. This slower rate of increase had been widely expected and is, in part, a reflection of the much higher level of OPEC expenditures now compared with 1973.

The projected $33 billion decline in the OPEC surplus next year from its 1980 peak will benefit mainly the current account position of the major industrial countries (see Table 6). They have experienced the sharpest drop in oil consumption and imports, and are OPEC's main trading partners. The direct benefit of a reduction in the OPEC surplus will be relatively smaller for the non-OPEC LDCs, whose share in OPEC trade is limited. A slower rise in oil prices will have favorable implications for LDC imports, but most of this is being offset by higher interest payments on their external debt (see discussion below). Thus, the current account deficit of the non-OPEC LDCs is not likely to begin to decline until next year, and even then it would still be at the level it reached in 1980.

Nevertheless, the stabilization of relative oil prices and a reduction in the OPEC surplus are bound to have indirect benefits for the developing countries. Reduced inflation and the improved current account position of the major industrial countries could lead to higher rates of economic growth, stimulating demand for LDC exports, and also making more funds available to the LDCs.

The adjustment process in the major non-oil LDCs

A second positive development is the stronger adjustment effort by many net oil-importing LDCs, which, of course, is fundamental to the maintenance of credit-worthiness. The adjustment process among the LDCs is a mixture of pain and innovation. Tough political decisions are necessary to constrain imports, but the need to husband foreign exchange can also bring forth considerable imagination and initiative to keep exports competitive and growing.

Table 7 presents some summary indicators of both aspects of the adjustment effort for the twelve major non-oil LDC borrowers. There now seems to be greater willingness to accept lower rates of economic growth in the interest of containing import demand: The group's real GDP growth rate should average about 4% per annum during 1979-81, versus nearly 6% per annum during 1974-78. A slowing is particularly evident in certain key countries — Brazil, Ivory Coast, Korea, the Philippines, and Turkey.

Another important indicator of adjustment is the slower growth of oil import volume since 1978. The impact has been particularly dramatic in Argentina, Brazil, Chile, India, and the Philippines. This has been achieved mainly by lower economic growth and the acceptance of realistic domestic pricing for petroleum products. The latter has led to greater conservation efforts and, where possible, to the development of oil substitutes, such as gasohol. Furthermore, oil production in several non-OPEC developing countries, such as Mexico, Peru, Syria,

Table 7

Indicators of adjustment: selected major non-oil LDCs

	Real GDP, % change		Oil import volume average annual % change		Purchasing power of exports[1] average annual % change			Non-oil trade balance billions of dollars	
	1974-80 average	1981	1974-78	1979-81	1974-78	1979-81	1981	1974-76 average	1981
Argentina	2.3	2.0	3.3	—8.8	2.7	5.8	16.7	0.8	0.0
Brazil	7.0	3.5	13.4	—5.4	3.7	14.4	15.5	—0.2	9.4
Chile	3.9	4.7	2.0	—6.6	1.2	15.4	—3.5	0.6	—0.8
India	3.4	4.5	12.0	6.6	4.9	4.8	8.0	0.9	1.4
Ivory Coast	5.7	2.0	9.2	3.4	10.4	—2.4	—8.0	0.5	0.8
Korea	7.3	4.9	15.0	5.1	17.9	6.8	10.2	—0.2	2.8
Philippines	5.9	3.0	6.6	2.1	1.5	12.3	8.3	—0.2	1.1
Thailand	7.5	6.0	5.0	6.0	9.6	12.3	8.1	0.3	0.9
Turkey	4.4	2.5	10.0	6.2	1.0	1.3	8.0	—1.6	—0.9
12 major non-oil LDCs[2]	5.3	3.7	11.5	2.0	7.3	9.5	9.9	1.8	20.6

[1] Nominal export growth deflated by a global measure of inflation.
[2] Nine countries shown above plus Bolivia, Colombia, and Taiwan.

Table 8

Crude oil production in major non-OPEC LDCs[1]

thousands of barrels per day

	1973	1980
Mexico	465	1,938
Egypt	165	596
Argentina	418	487
Malaysia	0	288
Oman	293	283
Brunei	320	230
Trinidad and Tobago	164	211
Peru	69	191
Brazil	169	182
India	148	182
Syria	99	165
Colombia	199	125
Tunisia	83	110
Others[2]	369	436
Total	2,961	5,424
Net oil importers[3]	1,087	1,176
Net oil exporters[3]	1,874	4,248

[1] Data exclude natural gas liquids.
[2] Countries with less than 100,000 bpd production in 1980.
[3] Position as of 1980.

Malaysia, and Egypt, has risen sharply since the early 1970s (see Table 8). Looking forward, further significant increases in oil production are expected by the mid-1980s in several net oil-importing LDCs (e.g., Ivory Coast, Brazil, India, and the Philippines).

The most favorable aspect of the adjustment process is the ability of several net oil-importing LDCs to generate healthy export growth in the face of sluggish economic activity in the industrial economies and protectionist tendencies. During 1979-80, the twelve major net oil-importing LDCs increased export earnings by an average annual rate of around 21%, or about 10% in real terms (see Table 7). Although this latter figure was still well below the performance of the early 1970s, it nonetheless was an acceleration from 1974-78. Significant growth in real exports has occurred over the past several years in Brazil, Chile, and the Philippines, while high rates have been maintained in Thailand and Taiwan. Projections for 1981 indicate major volume recoveries in Argentina, India, Korea, and Turkey. For the group of twelve, a 19% export growth (9.9% in real terms) is projected for 1981, and roughly the same rate for 1982.

To some extent, the strength of commodity prices played a role in sustaining LDC exports during 1979-80. Those countries that are heavily reliant on certain commodity exports — Ivory Coast, Chile, Philippines, and Thailand — will suffer a slowing of export growth this year, although 1982 should see some rebound in export prices as economic growth in the industrial countries recovers. But, more important from an adjustment policy standpoint, is the aggressive development over the past several years of new export markets and the increased credit and fiscal incentives provided by LDCs to exports of manufactures. This is particularly evident in Brazil, Chile, the Philippines, and, to a lesser extent, Thailand. Several countries have also pursued realistic exchange rate policies. Korea and Turkey, as discussed below, have devalued in real terms, while others have avoided substantial overvaluation. On the other hand, some developing countries (notably, Argentina and Chile) have allowed significant overvaluation of their currencies, with some adverse impact on their trade balances.

In sum, in a number of important non-oil LDCs, efforts to contain imports and promote export growth have been reasonably successful. A useful indicator in this regard is the behavior of non-oil trade balances. In the aggregate, the twelve major net oil-importing LDCs have improved their non-oil trade surpluses in a substantial way since the mid-1970s, from an average of less than $2 billion per year during 1974-76 to an average of $16 billion in 1979-80 and an estimated $21 billion this year. Preliminary projections for 1982 indicate a further rise to around $30 billion. Most of the major non-oil LDCs are participating in this improvement.

The specific adjustment efforts of Brazil, Korea, and Turkey are particularly noteworthy. In *Brazil*, after a series of largely unsuccessful attempts to contain domestic inflation during the last half of the 1970s, the authorities embarked in 1980 on an experiment which attempted to bring down inflationary expectations via pre-announced limits on interest rates and exchange rate depreciation. This experiment backfired and Brazil ended with a 110% inflation rate in 1980, the worst in its history. Since November of last year, however, there has been a shift back to realistic interest and exchange rates, and fiscal and monetary policies have been tightened as well. Although some time will be required before this program makes a dent in inflation, its impact on slower industrial growth and increased unemployment is already evident. For 1981 as a whole, industrial growth, which dominates the trend of real GDP, will probably be around 3%, versus 8% last year and the 7.6% annual average of 1973-80. In line with this slowing, merchandise trade is expected to be roughly in balance this year, a major improvement from the $2.8 billion deficit of 1980. With correct stabilization policies in place and having an impact, their sustainability over the next year or so is now the key to Brazil's adjustment effort — and probably also to its continued large-scale access to international credit markets.

In *Korea*, effective adjustment policies were stymied to some extent by the socio-political difficulties of 1979/80 and adverse weather conditions which caused a 22% decline in agricultural production. However, in January 1980 the authorities acted to correct the overvalued currency. After an initial 20% devaluation, the first realignment vis-à-vis the dollar since December 1974, the won was allowed to float in order to offset an adverse inflation differential. Moreover, economic policy was not overly stimulatory and interest rates were increased. In addition, domestic prices of energy products have been maintained far in excess of international levels.

The improved oil price outlook, together with the restoration of political stability in 1981, is expected to result in a significant improvement in growth and inflation. Although Korea's current account deficit is likely to deteriorate slightly this year, in response mainly to mounting interest payments, a further improvement in the non-oil trade deficit of around $1 billion is likely, following the $2.4 billion gain last year.

Turkey in January 1980 adopted a broad-based economic reform and stabilization program that is supported by a three-year IMF extended arrangement. The major elements of this program are the adoption of a more flexible exchange rate policy, the liberalization of domestic interest rates, and a revision of the investment code to allow more for-

Table 9

Publicized Euro-currency bank credits all lenders and Arab-led syndications[1]

	Borrowers		
	Industrial countries	*Non-OPEC LDCs*	*All borrowers*[2]
All lenders billions of dollars			
1978	29.0	26.7	70.2
1979	27.2	35.2	82.8
1980	39.1	23.5	77.4
Jan-Apr:			
1980	10.0	5.4	19.6
1981	12.6	10.5	27.0
Arab-led syndications billions of dollars			
1978	1.4	2.4	6.9
1979	2.2	2.2	7.7
1980	3.3	3.2	8.0
Jan-Apr:			
1980	0.6	0.2	1.3
1981	7.1	3.2	12.0
Arab-led syndications as % of all lenders			
1978	5.1	9.0	9.9
1979	7.9	6.3	9.3
1980	8.4	13.5	10.3
Jan-Apr:			
1980	6.0	3.4	6.5
1981	56.3	30.3	44.7

[1] Loans in which one or more Arab banks including consortium banks, acted as lead or co-lead managers.

[2] Includes OPEC, Communist countries, and international organizations.

eign participation in the economy. These measures have been accompanied by a reduction of domestic political unrest and by a substantial inflow of external economic aid, which alleviated the critical shortage of imported raw materials and capital goods.

So far, the program has been successful. Domestic inflation has been reduced from an annual rate of over 130% at the beginning of 1980 to about 30% in the latest three months ended February 1981, and industrial production turned around in the second half of last year. Turkey's export earnings also have recovered, due in part to market diversification toward Eastern Europe and the Middle East, and there has been a substantial increase in workers' remittances from abroad, in response to the more realistic exchange rate and interest rate policies. Nonetheless, Turkey still faces a difficult time ahead as oil payments and debt service absorb nearly 100% of total export earnings. A reduction in this ratio can only be attained by continued adherence to fiscal austerity and further efforts at export promotion. In this regard, given the country's natural resource base and potential for tourism, encouragement of foreign investment in oil exploration and in other sectors of the economy could play a major role.

Financing of the LDC deficits

Two favorable developments have occurred in the financing of the non-OPEC LDC current account deficits. First, Arab financial institutions have become more active in Euro-currency lending to the non-OPEC LDCs; and second, the International Monetary Fund has stepped up its support to developing countries.

With respect to the first, Table 9 shows that, during the first four months of this year, publicly announced Euro-loans to non-OPEC LDCs in which one or more Arab financial institution participated as a lead or co-lead manager amounted to $3.2 billion, nearly one third of the total of publicized loans to those countries. Assigning equal shares to lead managers of syndicated loans, Arab financial institutions may have accounted for about $1.3 billion, or roughly 12% of the total of publicized Euro-loans to the non-OPEC LDCs in January-April 1981. This share has risen over the past two years, and there is reason to expect that it will continue to grow as these institutions become more familiar with the major LDC borrowers and gain experience in assessing country risk.

During 1980 and through mid-May of this year, the International Monetary Fund made new loan commitments of $14.6 billion, virtually all to the developing countries (see Table 10). Thus, in only sixteen months, the Fund has committed to the LDCs nearly as much as it had cumulatively over the previous seven years. Moreover, the bulk of the commitments — $13.2 billion, or 90% of the total — is for programs which are conditional upon the implementation of adjustment measures. Drawings have been substantially less, $6.2 billion during the fifteen months ending in March, reflecting the fact that many commitments are for periods of more than one year. Additionally, the poorer LDCs have drawn $2 billion from the IMF Trust Fund since the beginning of 1980.

The Fund has been able to step up its lending to developing countries partly because it has been relatively liquid. Most of the new loan commitments since the beginning of 1980 were funded through the $10 billion Supplementary Financing Facility, which was established to provide "bridge" financing until the

Table 10

IMF commitments and drawings January 1980 through mid-May 1981

millions of dollars

	Commitments		*Drawings*
	Conditional[1]	*Unconditional*[2]	*Total*[3]
Yugoslavia	1,953	163	605
Pakistan	1,497	74	123
Turkey	1,469	84	695
Morocco	1,026	0	367
Bangladesh	940	0	229
Zambia	940	0	59
Korea	677	188	755
Ivory Coast	603	0	111
Jamaica	587	43	0
China	529	0	961
Sudan	502	77	168
Philippines	482	110	415
Kenya	284	0	106
Senegal	220	0	51
Tanzania	211	18	47
Sierra Leone	192	0	47
Madagascar	128	34	46
Guyana	118	7	49
Panama	106	0	25
Ethiopia	79	21	0
Bolivia	78	0	63
Liberia	76	0	30
Costa Rica	71	0	29
Malawi	59	0	29
Togo	56	0	28
India	0	313	313
Romania	0	143	143
Other countries	290	183	685
Total	13,173	1,458	6,179

[1] New loan commitments under stand-by and extended arrangements. Includes first credit tranche commitments if part of a conditional program. The figures are adjusted for revisions of original commitments.

[2] Includes new publicized authorizations under the compensatory financing facility and first credit tranche commitments which are not part of conditional programs.

[3] Through end-March 1981. Includes drawings on reserve tranches but not Trust Fund loans. Total excluding reserve tranche drawings is $5.6 billion.

Seventh Review of Quotas was completed. Ratification of the latest round of quota increases late last year augmented by about $15 billion the Fund's holdings of usable foreign currencies — currencies of countries designated by the IMF as having no balance-of-payments difficulties and being in strong reserve position.

The prospects for maintaining the Fund's new, higher lending profile to the LDCs in the future have been enhanced through the recent conclusion of borrowing arrangements with the governments of Saudi Arabia and thirteen OECD countries. Saudi Arabia has agreed to lend the Fund $9.4 billion during 1981-82, with another $4.7 billion possible in 1983 subject to the adequacy of the Saudi international reserve position. In addition, Saudi Arabia's IMF quota has been increased by $1.2 billion (to $2.5 billion). Thirteen OECD countries[*] have agreed to lend the Fund $1.3 billion during 1981-82. Thus, the IMF has obtained nearly $12 billion in extra funds to lend over the next two years, and this amount may well be augmented by additional Saudi loans during 1983, and perhaps by agreements now under discussion with Kuwait and Abu Dhabi.

The Fund's liquidity position has also been enhanced by the fact that industrial countries have not had to draw on IMF resources. This situation contrasts with that following the first oil shock, when several industrial countries, including the United Kingdom and Italy, were among the principal users of Fund resources. Looking forward, the financing requirements of the smaller industrial countries continue to be large (see Table 6), but they are likely to be covered largely in the private financial markets, leaving the Fund free to support adjustment efforts among the developing countries.

This support function is indeed the most important contribution that the IMF can make to the healthy functioning of the international monetary system. The basic reason is its ability to apply policy conditions to its loans with the objective of fostering balance-of-payments adjustment. The Fund and the World Bank (which increasingly are mutually supportive in policy recommendations to member countries) are the only major sources of credit which are capable of making the availability of financial resources specifically subject to performance under mutually agreed adjustment policies.

After the first oil shock, IMF conditionality was criticized, especially among some LDCs, for being overly rigid. Under the circumstances of extreme global payments imbalances brought on by the rise of oil prices, it was unrealistic to expect countries — especially the poorer ones — to adjust as rapidly and in the same manner as had been the case traditionally. Hence, the nature of IMF conditionality has been modified in recent years to allow, where appropriate (1) a longer period of conditional lending, via the Extended Facility under which funds may be drawn over three years; (2) a wider array of policies to promote adjustment, including those dealing with supply-side or structural problems as well as those encompassing overall demand management; and (3) a longer period of repayment of drawings on the Fund, i.e., up to ten years under the Extended Facility. These changes have introduced a much-needed flexibility, and together with the increased resources now available to Fund borrowers at substantially below-market interest rates, they may account for the greater willingness of developing countries to seek IMF arrangements. Furthermore, the ex-

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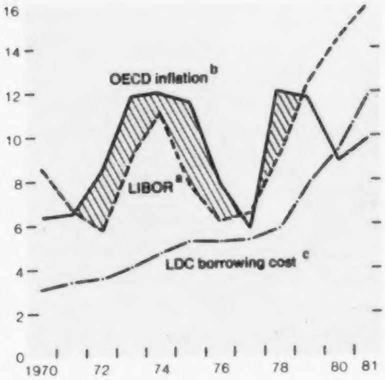
[*] Austria, Belgium, Canada, Denmark, France, West Germany, Italy, Japan, the Netherlands, Norway, Sweden, Switzerland, and the United Kingdom.

Inflation and interest rates
percent per annum



a) Six-month deposit rate, annual average
b) GDP deflator in dollar terms, two-year moving average at annual rate
c) Interest payments by group of twelve major non-oil LDCs as percent of external debt outstanding at mid-year

panded IMF involvement in support of adjustment programs has become a confidence-building factor in the international financial markets, enhancing the willingness of commercial banks to continue to finance the major portion of non-oil LDC deficits.

Potential problem areas

Despite these favorable developments, several potential dangers remain. Since the non-oil LDCs today face a more somber global environment, it is not surprising that they have begun to give greater emphasis to adjustment policies. But, a major uncertainty is whether the authorities in some of these countries will be able politically to sustain policies which depress the rate of per capita income growth. Hence, political developments in some non-oil LDCs could jeopardize the adjustment process, unless that process can in the medium run be based more on export growth and less on constraint of imports. However, prospects for economic growth in the LDCs are dampened by the likelihood that the recovery in the industrialized countries in 1982 will not be as strong as in 1976, when real GDP growth in OECD jumped to a 5.2% rate following the 1974-75 recession. At the moment, about a 3.5% growth rate is expected for the OECD group in 1982.

A second uncertainty in the adjustment process concerns the effectiveness of the IMF. The increase in its activities supporting LDC adjustment programs over the past year is encouraging, and the new flexibility in its conditionality is appropriate to the present situation. The desirability of a flexible response in light of a global situation of large payments imbalances, however, does not remove the necessity to preserve the *temporary* nature of Fund assistance to individual countries. In this sense the respective roles of the banks and the IMF differ sharply: Whereas banks can be expected to maintain or even increase their exposures to credit-worthy countries, the need for Fund credit by member countries should always be temporary. To assure that member countries do not become perennial debtors to the Fund it is imperative that IMF conditions are sufficiently strong to bring about adjustment and that they are adhered to by the borrowers. In a similar vein, proposals for large-scale SDR allocations appear incompatible with the Fund's central role in promoting adjustment. With the reconstitution provision for the use of the SDR now completely abolished, SDR allocations in principle represent unconditional aid.

Third, underlying all oil price projections is the assumption that there will be no new major oil supply disruption. In spite of the sharp drop in oil demand and the present adequate levels of oil stocks, another unexpected and politically induced reduction in oil supplies could alter the psychology of the market and lead to higher than projected oil prices. This in turn could imply a larger OPEC current account surplus, a smaller improvement in industrial countries' current account and growth performance, and a worsened outlook for the LDCs. In view of the number of potentially explosive conflicts that exist today in the Middle East and elsewhere, and the unpredictability of political developments, it is essential that oil-importing countries continue to pursue strong energy policies, even if consumption is already falling.

Fourth, a major new problem area is the burden of interest payments on the non-oil LDCs. For the twelve-country group of major non-oil LDCs, gross interest payments in

1981 are likely to be nearly $26 billion, under the assumption that LIBOR will average almost 16% for the year as a whole. This is equivalent to about 17% of exports, or roughly double the share of the last half of the 1970s. Of course, the burden of interest payments varies widely among these countries — from a low 5% of exports for India to the 34%-40% range for Argentina, Brazil, and Turkey — but it is increasing for all of them.

This rise in the ratio of interest payments to exports reflects three major trends since the mid-1970s — the growth of the relative size of external debt, the increase in its floating-rate portion, and higher interest rates. Since 1973, the total external debt of the twelve major non-oil LDCs has nearly quadrupled and in relative terms has risen from 19% to 25% of the group's aggregate GDP. The share of their external debt that carries floating interest rates rose from roughly 28% of total debt in 1973 to nearly 60% by the end of 1980. And, the burden of floating-rate debt has been magnified severely by the trend of interest rates in industrial countries since 1979, when LIBOR became positive in real terms (see chart, p. 10).

At the margin, a one percentage point change in LIBOR now causes more of a variance in LDC financing requirements than does a one percent change in oil prices. For example, among the twelve major non-oil LDCs, the aggregate oil import bill for 1981 is estimated at $44.2 billion (gross), incorporating the above-discussed assumption that the average OPEC price for the year will be $36 per barrel, or 13.5% above that for 1980. An additional one percent increase in the oil price assumption would add about $400 million to the oil import bill given no change in volume assumptions. By contrast, an extra percentage point to the LIBOR assumption (16%, as noted above) would add nearly $1.3 billion to interest payments.

These observations highlight the adverse impact on the external financial needs of all major borrowing countries, and on the non-oil LDCs in particular, of the manner in which the industrial countries are choosing to fight inflation. At present, there is much greater reliance on monetary policies than on fiscal policies. The burden on monetary policy is especially great in the United States, where U.S. interest rates have climbed close to their peak levels of last year. High U.S. interest rates, together with a relatively strong U.S. current account performance, have placed considerable pressure on European exchange rates, forcing many European countries to raise their interest rates despite sluggish economic conditions.

From a global perspective, the most urgent economic priority is to reduce U.S. inflation by pursuing a strategy that will lead to a significant reduction of U.S. interest rates. It is difficult to see how this could be accomplished without a very tight fiscal policy to facilitate a slowing of U.S. money supply growth. Considerable progress may now be made toward reducing the growth of federal expenditures, with the Administration's proposals receiving broad-based Congressional support. Much still needs to be done, however, to ensure a steady reduction of the federal budget deficit that will reduce the government's large borrowing requirements. As was noted earlier, the twelve major non-oil LDC borrowers have a significant stake in the outcome: The difference between an anti-inflation strategy that succeeds in reducing LIBOR, say to 10%, and one that keeps LIBOR close to 20%, for instance, could make a difference of as much as $13 billion in their interest payments alone next year.

Statistical appendix

for key to data in tables see January 1981 issue.

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Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

Effective exchange rates

Index numbers, March 1973=100. The index of the effective exchange rate for a currency is a measure of that currency's trade-weighted average appreciation or depreciation vis-à-vis the currencies of 15 other major countries. The exchange rates used in the construction of this index are the averages of daily noon spot exchange rates in New York for months and for weeks ending on dates shown. The trade weights used are based on 1976 bilateral trade in manufactures.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
pre-June 1970 parities	118.5	94.9	79.3	116.2	91.6	97.5	110.9	95.9	98.2	88.3	97.8	97.9	98.1	102.2	92.2	98.4
Smithsonian central rates	107.0	101.3	88.7	116.0	95.4	96.1	108.3	97.0	99.1	91.6	98.0	96.0	96.3	100.5	91.7	98.1
1980																
May	98.4	83.6	109.4	78.6	138.1	90.3	53.3	110.6	118.2	163.7	121.4	91.5	103.5	88.1	74.8	71.5
June	96.2	84.9	113.8	78.7	137.9	90.6	53.1	110.8	118.6	164.3	121.7	92.0	103.0	87.8	74.8	71.4
July	96.0	84.8	111.7	79.3	138.2	91.1	52.7	110.9	119.1	165.5	122.2	92.5	102.8	87.8	75.1	70.0
August	97.2	84.5	111.1	80.5	137.2	90.7	52.7	110.2	119.0	163.8	122.0	91.8	103.3	88.2	75.7	69.6
September	96.4	83.9	115.8	81.4	137.0	90.4	52.4	109.9	119.1	164.7	121.8	91.4	103.3	88.2	75.4	68.4
October	96.8	83.6	119.4	83.2	135.4	89.9	52.0	109.1	118.3	165.5	121.0	90.5	103.2	88.7	75.4	68.3
November	98.9	82.7	118.8	84.9	134.3	89.0	51.7	108.3	117.7	164.5	119.9	89.5	103.6	89.0	76.1	68.6
December	99.9	82.2	122.0	84.8	133.9	88.7	51.4	107.8	117.0	162.5	119.8	89.4	102.6	88.9	76.6	67.5
1981																
January	99.4	82.5	126.7	87.8	132.8	88.3	51.0	107.2	116.2	160.9	119.4	88.0	101.7	88.8	76.6	66.8
February	102.3	82.5	127.3	87.7	131.7	87.1	50.3	106.3	115.0	159.1	118.8	86.4	103.1	90.2	77.4	65.9
March	102.5	83.1	125.5	85.1	133.9	87.0	49.8	106.0	114.7	160.5	120.0	86.1	103.7	90.1	78.1	65.9
April	104.2	83.5	123.0	84.7	133.9	86.7	48.6	106.2	114.3	160.3	120.1	85.7	104.6	90.5	79.0	65.9
3	102.7	83.7	123.4	85.3	134.4	87.1	48.7	106.2	114.7	160.9	120.2	86.1	104.1	90.4	78.5	66.2
10	103.5	83.8	123.3	84.6	134.2	87.0	48.7	106.1	114.5	160.5	120.2	85.9	104.4	90.4	78.7	65.9
17	104.7	83.4	122.4	84.5	133.7	86.7	48.6	106.0	114.5	160.3	120.1	85.9	104.5	90.6	79.1	65.8
24	104.7	83.4	122.2	84.9	133.8	86.5	48.5	106.2	114.2	160.3	120.0	85.5	105.0	90.4	79.2	65.7
May 1	104.8	83.3	124.1	84.7	133.5	86.2	48.5	106.7	113.8	159.9	119.9	85.2	104.7	90.8	79.2	65.8
8	106.3	83.2	123.5	84.8	132.8	85.6	48.3	106.4	113.7	159.2	119.7	84.9	105.6	90.7	79.7	66.0
15	107.4	83.4	122.4	84.7	132.6	84.0	48.5	106.5	113.7	160.6	119.9	84.9	105.9	91.0	80.3	66.3

Real effective exchange rates

Index numbers, March 1973=100. The index of the real effective exchange rate is the index of the effective exchange rate adjusted for inflation differentials which are measured by wholesale prices of nonfood manufactures. Exchange rates and trade weights used in the construction of this index are the same as those used for effective exchange rate indices. Annual figures are averages of months.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
1977	100.9	99.2	93.3	101.6	102.7	96.5	92.3	99.9	104.0	105.6	109.5	97.3	99.0	105.2	91.8	101.3
1978	96.4	92.1	106.9	106.4	103.3	97.2	90.8	99.8	103.9	122.3	109.6	103.5	94.7	96.8	87.0	97.2
1979	96.5	92.2	95.7	118.8	104.1	99.2	90.6	97.3	100.4	115.7	108.4	101.5	89.6	99.5	85.9	109.3
1980	98.1	91.3	93.5	138.3	101.0	100.9	93.0	92.7	97.0	105.5	109.1	94.0	91.6	101.0	87.3	103.4
1980																
May	98.2	90.2	93.9	136.0	102.0	100.4	92.8	93.4	97.3	106.3	109.3	93.8	92.0	100.6	86.0	103.9
June	96.1	91.6	97.7	137.3	101.8	100.5	92.9	93.4	97.2	106.0	109.7	93.9	90.8	100.5	85.9	103.0
July	96.4	91.4	94.9	138.5	101.5	101.4	92.8	92.9	97.7	106.2	110.4	95.6	91.2	100.2	86.8	101.7
August	97.4	91.2	94.5	140.6	100.5	102.4	92.8	91.6	97.3	104.3	109.9	95.3	90.9	100.8	88.2	101.6
September	96.0	91.3	98.4	142.3	100.0	102.1	93.2	92.0	96.8	104.6	109.6	93.7	91.8	101.1	88.1	100.6
October	97.7	90.6	99.4	144.6	99.0	101.4	92.7	91.6	95.6	104.7	108.4	93.6	92.2	101.3	87.9	100.2
November	98.8	89.8	98.1	147.0	98.3	100.0	93.0	91.7	94.4	104.5	106.9	92.3	92.9	101.6	89.0	100.8
December	100.9	89.1	99.9	146.1	97.8	100.9	92.8	91.0	93.6	103.1	107.4	92.6	92.1	101.5	89.7	100.1
1981																
January	100.3	90.3	102.2	152.1	96.5	99.5	92.7	89.9	94.7	101.2	107.8	89.5	92.4	102.2	89.5	100.1
February	104.1	89.7	101.1	151.7	95.4	98.1	92.3	91.4	91.8	100.2	106.7	88.0	94.6	104.0	91.0	98.4
March	104.8	90.1	98.2	147.9	96.9	98.1	92.0	90.3	91.4	100.9	107.7	88.6	96.2	103.3	91.3	98.6
April	106.9	90.7	95.1	148.1	97.1	97.4	90.4	90.6	90.7	99.6	108.3	86.9	96.9	103.9	92.2	98.9

Euro-currency market size

based on foreign-currency liabilities and claims of banks in major European countries, the Bahamas, Bahrain, Cayman Islands, Panama, Canada, Japan, Hong Kong, and Singapore
billions of dollars (rounded to nearest $5 billion), at end of period

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	
										Sep[r]	Dec[r]
Estimated size											
Gross	150	205	310	390	480	590	725	930	1 190	1 365	1 470
Liabilities to nonbanks	30	35	55	75	80	100	125	170	230	270	270
Liabilities to central banks	15	25	40	60	70	85	110	120	155	170	180
Liabilities to other banks[a]	105	145	215	255	330	405	490	640	805	925	1 020
Net	85	110	160	215	250	310	380	485	600	700	735
Claims on nonbanks	35	45	65	100	115	150	195	245	295	355	365
Claims on central banks and on banks outside market area[b]	35	45	75	95	115	135	155	195	245	275	295
Conversions of Euro funds into domestic currencies by banks in market area[c]	15	20	20	20	20	25	30	45	60	70	75
Euro-dollars as % of gross liabilities in all Euro-currencies	76	78	73	77	78	79	76	74	72	73	76

a includes unallocated liabilities
b includes unallocated claims
c in European market area only
r revised
p preliminary

Euro-currency deposit rates

prime banks' bid rates in London, at or near end of month

	1977	1978	1979	1980				1981			
	Dec	Dec	Dec	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Euro-dollar:											
overnight	7.12	10.62	14.00	12.50	13.25	18.50	19.25	17.50	15.75	15.00	17.17
7-day fixed	6.31	10.62	14.00	12.50	13.50	18.50	19.75	17.50	15.50	14.37	16.00
one month	6.87	11.00	14.37	13.19	14.50	18.37	19.12	17.68	16.81	14.81	17.75
three months	7.19	11.69	14.44	13.81	15.37	18.06	17.62	17.50	16.62	14.81	16.87
six months	7.50	12.31	14.44	13.94	14.87	16.87	16.75	16.75	16.75	14.81	17.00
twelve months	7.67	12.00	12.87	13.69	14.12	15.50	14.87	15.75	16.06	14.81	16.31
Euro-mark:											
one month	2.19	3.19	8.50	8.87	8.81	9.69	8.87	9.31	14.87	12.31	12.12
three months	2.50	3.31	8.56	8.87	8.94	9.56	8.87	9.37	14.25	12.31	12.44
six months	2.81	3.69	8.56	8.87	8.81	9.31	8.87	9.37	13.37	12.00	12.44
twelve months	3.06	3.81	8.12	8.69	8.56	9.37	8.93	9.31	12.75	11.43	12.00
Euro-Swiss franc:											
one month	1.31	—.06	5.19	5.25	4.12	6.12	6.00	5.50	8.37	7.50	9.50
three months	1.37	0.00	5.75	5.75	5.44	6.12	6.00	6.00	8.37	7.62	9.50
six months	1.87	0.12	5.87	5.75	5.12	6.12	5.75	6.00	8.37	7.62	9.50
twelve months	2.25	0.62	5.56	5.62	5.37	6.19	5.50	6.12	7.62	7.62	9.50
Euro-sterling:											
one month	6.50	12.00	16.75	16.25	17.00	14.50	14.75	14.25	13.75	12.50	12.37
three months	6.62	12.62	16.75	15.87	16.75	14.62	14.75	13.75	12.75	12.50	12.37
six months	7.12	13.25	16.75	15.00	16.12	14.44	14.25	13.12	12.12	12.37	12.37
twelve months	7.37	13.00	15.25	14.37	15.00	14.00	14.00	13.12	12.00	12.18	12.37
Euro-French franc:											
one month	12.25	10.50	13.87	11.62	11.00	10.50	11.12	10.37	11.75	12.00	13.12
three months	13.25	9.87	14.00	12.06	11.31	11.37	11.75	10.87	12.87	12.37	13.50
six months	14.00	9.87	14.12	12.56	12.00	12.37	12.25	11.87	13.00	12.50	13.62
twelve months	13.25	10.25	13.75	12.81	12.62	13.00	12.87	12.62	13.00	13.00	13.62
Euro-yen:											
one month	0.62	—.69	7.62	12.50	10.00	10.25	9.12	8.25	8.62	7.75	6.62
three months	1.81	0.62	8.31	12.25	9.62	10.12	9.25	8.50	8.62	7.62	7.37
six months	2.75	1.87	8.62	11.50	9.12	10.12	9.62	8.50	8.37	7.75	7.37
twelve months	3.25	2.19	7.94	10.50	9.00	9.37	9.37	8.50	8.37	7.81	7.37

Euro-currency bank credits

publicly-announced in period, in millions of dollars

	1978	1979	1980	1981			Jan-May	
				Mar	Apr[r]	May[p]	1981	1980
Industrial countries	**28 952**	**27 248**	**39 100**	**1 439**	**3 468**	**1 066**	**13 670**	**11 354**
Australia	212	941	2 475	—	80	—	171	312
Canada	5 705	1 845	1 743	—	—	—	240	207
Denmark	2 242	1 205	1 720	49	676	—	900	512
Finland	550	92	1 040	—	—	21	261	350
France	1 914	2 955	1 745	360	—	30	2 010	211
Greece	508	1 009	1 333	10	400	—	610	658
Ireland	616	687	237	—	250	—	274	—
Italy	2 485	3 708	6 268	100	333	480	2 698	2 309
Norway	1 517	935	685	—	—	25	72	297
Spain	2 426	4 184	5 457	400	410	235	1 869	1 951
Sweden	1 872	1 263	1 370	—	500	—	1 930	233
United Kingdom	3 898	795	1 470	60	10	200	270	898
United States	1 206	2 348	6 719	150	230	—	917	820
Other[a]	3 801	5 281	6 838	310	579	75	1 448	2 596
Developing countries	**37 290**	**47 964**	**35 034**	**3 047**	**3 016**	**1 915**	**15 258**	**13 487**
Non-OPEC countries	26 669	35 225	23 535	2 514	2 455	1 762	12 280	7 701
Argentina	1 461	2 965	2 506	107	10	200	832	742
Brazil	5 634	6 278	4 158	940	50	356	1 963	859
Chile	1 045	867	1 322	130	147	171	888	348
Korea	2 651	3 258	1 917	—	258	40	693	1 103
Malaysia	858	1 168	—	50	—	—	545	—
Mexico	7 250	8 243	5 971	269	1 420	347	3 476	1 860
Morocco	605	499	420	—	300	—	440	249
Peru	—	596	480	332	—	—	432	245
Philippines	2 073	2 067	1 056	95	50	155	402	349
Taiwan	254	1 063	314	175	—	73	548	14
Other[b]	4 838	8 221	5 391	416	220	420	2 061	1 932
OPEC countries	10 621	12 739	11 499	533	561	153	2 978	5 785
Algeria	2 576	1 906	40	—	—	—	—	40
Indonesia	1 118	1 061	1 435	145	72	78	298	829
Nigeria	825	1 373	1 330	100	—	—	494	370
United Arab Emirates	726	401	101	—	—	—	—	59
Venezuela	2 054	6 830	6 715	213	357	—	1 660	3 477
Other	3 322	1 168	1 878	75	132	75	526	1 010
Communist countries	**3 767**	**7 325**	**2 809**	**400**	**75**	—	**960**	**635**
China	—	3 395	181	—	—	—	—	—
East Germany	642	796	303	—	50	—	300	55
Hungary	700	260	550	400	—	—	550	249
Poland	374	849	800	—	—	—	—	29
Other[c]	2 051	2 025	975	—	25	—	110	302
International organizations	**160**	**275**	**429**	—	—	—	**50**	**250**
TOTAL	**70 169**	**82 812**	**77 372**	**4 886**	**6 559**	**2 981**	**29 938**	**25 726**

[a] includes multi-national organizations [b] includes regional development organizations [c] includes COMECON institutions [p] preliminary
[r] revised

International bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980				1981			
	Dec	Dec	Dec	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
U.S. companies:											
U.S. dollar	7.95	8.55	10.13	10.73	11.27	11.46	11.76	11.94	12.17	12.46	12.51
Swiss franc	5.31	5.70	6.61	7.28	7.26	7.38	7.27	7.44	7.26	7.42	7.46
European companies:											
U.S. dollar	8.42	9.21	10.93	11.71	12.04	12.23	12.42	12.53	13.06	12.94	12.99
German mark	6.80	6.84	7.55	8.31	8.66	8.82	8.79	8.85	9.58	9.16	9.18
Governments:											
U.S. dollar	8.42	9.12	10.66	11.08	11.22	11.27	11.83	11.93	12.37	12.37	12.43

New international bond issues

new issues in period, in millions of dollars

	1978	*1979*	*1980*	*1981*			*Jan-May*	
				Mar	*Apr^{r}*	*May^{p}*	*1981*	*1980*
By type:								
Euro-bonds, total	**14 125**	**18 726**	**23 970**	**1 756**	**1 297**	**1 359**	**8 592**	**7 730**
by category of borrower								
U.S. companies	1 122	2 872	4 107	130	290	263	1 650	1 345
Foreign companies	4 540	7 183	9 032	799	591	743	3 270	3 578
State enterprises	3 291	4 524	5 839	577	198	293	2 272	2 083
Governments	3 643	2 433	3 045	50	46	—	706	1 317
International organizations	1 529	1 714	1 947	200	172	60	694	407
by currency of denomination								
U.S. dollar	7 290	12 565	16 427	1 300	900	1 060	6 824	5 537
German mark	5 251	3 626	3 607	—	69	96	165	1 219
Dutch guilder	394	531	1 043	44	79	60	307	166
Canadian dollar	—	425	279	—	—	—	—	110
European unit of account	165	253	65	—	—	—	32	25
Other	1 025	1 326	2 549	412	249	143	1 264	673
Foreign bonds outside the United States, total	**14 359**	**17 749**	**14 521**	**1 195**	**1 157**	**575**	**4 938**	**5 979**
by category of borrower								
U.S. companies	245	217	307	93	—	—	221	194
Foreign companies	2 110	3 463	3 157	175	174	201	1 250	1 063
State enterprises	3 163	3 284	2 830	463	371	96	1 384	1 049
Governments	5 771	7 663	4 086	262	67	155	850	2 266
International organizations	3 070	3 122	4 141	202	545	123	1 233	1 407
by currency of denomination								
German mark	3 789	5 379	4 839	97	190	22	417	2 566
Swiss franc	5 698	9 777	7 617	728	534	362	3 101	2 795
Dutch guilder	385	75	259	87	—	24	156	107
Japanese yen	3 826	1 833	1 088	132	325	47	820	363
Other	671	685	718	151	108	120	444	148
Foreign bonds in the United States, total	**5 795**	**4 515**	**3 429**	**200**	**1 300**	**200**	**2 240**	**1 069**
by category of borrower								
Canadian entities	3 142	2 193	2 136	—	1 100	100	1 611	620
International organizations	459	1 100	550	—	—	—	—	250
Other	2 194	1 222	743	200	200	100	629	199
By country of borrower:								
Industrial countries	**24 964**	**31 886**	**32 732**	**2 373**	**2 791**	**1 676**	**12 649**	**11 986**
Australia	1 218	593	539	96	30	—	126	230
Austria	1 027	1 218	1 859	126	110	49	503	583
Canada	4 764	4 197	3 797	288	1 356	240	2 832	1 212
Denmark	1 017	752	1 125	100	26	47	173	445
Finland	952	699	392	59	46	106	216	196
France	1 286	2 106	2 820	313	155	142	1 332	945
Japan	3 467	5 775	5 309	493	204	488	2 067	1 846
Netherlands	250	832	1 585	—	17	—	142	376
Norway	2 751	1 954	892	27	35	18	120	502
Sweden	876	1 530	3 244	273	263	29	1 023	1 396
United Kingdom	1 365	1 181	1 733	30	175	29	334	587
United States	2 973	6 767	5 587	223	290	263	1 871	2 711
Developing countries	**4 227**	**3 093**	**2 485**	**376**	**246**	**275**	**1 164**	**678**
Non-OPEC countries	2 684	2 675	1 942	280	199	150	878	457
Brazil	843	930	349	—	46	—	46	—
Mexico	568	363	544	245	108	100	622	164
Philippines	170	175	70	—	—	—	30	—
OPEC countries	1 543	418	543	96	47	125	286	220
Algeria	721	208	—	—	—	—	—	—
Venezuela	588	55	398	96	—	125	221	120
Communist countries	**30**	**75**	**65**	—	—	—	**30**	**50**
Hungary	—	—	65	—	—	—	—	50
International organizations	**5 058**	**5 936**	**6 638**	**402**	**717**	**183**	**1 927**	**2 064**
TOTAL	**34 279**	**40 990**	**41 920**	**3 151**	**[illegible] 754**	**2 134**	**15 770**	**14 778**

Central bank discount rates

	1977	1978	1979	1980			1981	Current	
	end Dec	end Dec	end Dec	end Jun	end Sep	end Dec	end Mar	May 20 1981	effective since
United States	6.00	9.50	12.00	11.00	11.00	13.00	13.00	14.00	May 5, 81
Canada	7.50	10.75	14.00	11.83	11.20	17.36	16.69	18.98	May 14, 81
Japan	4.25	3.50	6.25	9.00	8.25	7.25	6.25	6.25	Mar 18, 81
United Kingdom	7.00	12.50	17.00	17.00	16.00	14.00	12.00	12.00	Mar 11, 81
Belgium	9.00	6.00	10.50	13.00	12.00	12.00	16.00	14.00	Apr 30, 81
France	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	3.00	3.00	6.00	7.50	7.50	7.50	7.50	7.50	May 2, 80
Italy	11.50	10.50	15.00	15.00	16.50	16.50	19.00	19.00	Mar 23, 81
Netherlands	4.50	6.50	9.50	9.50	8.50	8.00	9.00	9.00	Mar 3, 81
Austria	5.50	4.50	3.75	6.75	6.75	6.75	6.75	6.75	Mar 21, 80
Denmark	9.00	8.00	11.00	13.00	12.00	11.00	11.00	11.00	Oct 27, 80
Finland	8.25	7.25	8.50	9.25	9.25	9.25	9.25	9.25	Feb 1, 80
Ireland	6.75	11.85	16.40	16.85	13.50	12.75	12.75	13.90	Apr 24, 81
Norway	6.00	7.00	9.00	9.00	9.00	9.00	9.00	9.00	Nov 30, 79
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	Jul 26, 77
Sweden	8.00	6.50	9.00	10.00	10.00	10.00	12.00	12.00	Jan 20, 81
Switzerland	1.50	1.00	2.00	3.00	3.00	3.00	4.00	5.00	May 11, 81
Argentina	165.27	108.19	89.90	85.86	69.64	87.01	109.34	104.88	Apr 7, 81
Korea	14.00	14.50	14.50	19.50	17.50	15.50	15.50	15.50	Nov 11, 80
New Zealand	10.00	10.50	13.00	13.00	14.00	14.00	14.00	14.00	Jul, 80
Philippines	6.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	May 19, 78
Singapore	3.50	4.50	6.75	8.50	8.75	10.50	11.00	10.00	Apr 20, 81
South Africa	9.00	8.50	7.00	7.00	7.00	7.00	8.00	9.50	May 6, 81
Venezuela	7.00	7.50	11.00	10.00	10.00	13.00	13.00	12.00	Apr 25, 81

a: applicable to large banks; 13% for other banks

Day-to-day money rates

monthly averages

	1977	1978	1979	1980				1981			
	Dec	Dec	Dec	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
United States	6.56	10.03	13.78	10.87	12.81	15.85	18.90	19.08	15.93	14.70	15.50
Canada	6.84	9.44	13.83	9.82	10.70	11.05	15.61	16.93	16.58	16.90	16.79
Japan	5.01	4.57	8.02	11.40	11.00	9.61	9.49	3.90	8.54	8.24	7.19
Australia	9.96	8.40	7.84	9.81	8.96	9.84	9.51	9.69	10.35	11.11	11.83
United Kingdom	4.81	10.00	14.87	14.90	15.00	12.25	13.00	12.19	12.19	11.06	10.15
Belgium	7.48	6.73	10.65	9.64	9.60	10.16	9.68	10.32	9.18	10.13	16.51
France	9.30	6.67	12.17	11.37	11.22	10.74	10.87	10.73	10.91	11.72	12.23
Germany	3.24	3.61	9.15	9.28	8.98	8.82	9.13	9.13	10.57	11.25	n.a.
Italy	11.37	11.00	16.00	16.87	17.87	17.62	17.50	17.37	17.37	19.62	19.62
Netherlands	5.27	10.00	15.67	9.75	9.30	9.00	8.37	8.95	9.12	9.75	9.50
Austria	9.25	5.37	8.50	11.00	11.00	11.50	11.50	9.50	9.00	11.00	12.00
Finland	22.99	9.29	13.53	12.50	12.50	12.50	12.50	12.50	12.50	11.72	10.57
Ireland	8.00	12.12	16.86	13.62	13.25	13.38	13.31	13.44	13.38	13.12	15.38
Spain	7.22	16.75	9.61	13.16	14.38	15.24	16.74	15.89	12.50	11.98	13.89
Sweden	8.91	6.26	11.99	11.95	13.00	11.80	11.41	12.75	16.97	15.40	14.20
Switzerland	0.85	0.00	1.25	2.00	0.87	3.37	5.75	3.75	3.50	4.50	5.00
Argentina	n.a.	n.a.	78.22	51.36	54.58	58.04	70.84	74.81	92.07	133.08	96.66
Brazil	28.44	35.64	32.28	35.76	38.28	40.56	49.68	51.60	54.48	56.64	49.32
Hong Kong	4.87	9.67	14.19	8.31	10.87	13.87	14.05	14.18	18.00	16.85	16.43
Korea	14.40	15.00	15.00	17.22	17.22	14.82	14.82	14.82	14.82	14.82	14.82
Philippines	14.44	13.22	16.25	9.71	9.26	13.10	15.70	13.66	14.43	17.34	15.59
Singapore	3.59	4.98	10.17	10.75	14.53	11.06	10.23	11.77	12.73	9.73	6.76
South Africa	7.65	7.11	3.81	4.35	4.47	4.99	5.60	6.22	7.06	7.26	7.49
Euro-dollars	6.94	10.80	14.41	10.96	13.18	16.15	19.22	19.05	16.14	14.57	16.36

Treasury bill rates

bond-equivalent yields, at or near end of month

	1977	1978	1979	1980				1981			
	Dec	Dec	Dec	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
United States	6.33	9.42	12.39	11.09	13.07	14.84	14.87	15.83	14.80	13.55	15.51
Canada	7.17	10.46	13.66	10.95	11.91	13.70	17.01	16.86	16.83	16.44	17.35
Japan	4.15	3.39	5.68	6.44	6.44	5.93	5.93	5.93	5.93	5.93	5.93
Australia	8.35	8.35	9.31	10.56	10.95	11.47	12.17	12.42	12.68	12.72	13.78
United Kingdom	6.42	12.01	16.45	14.37	14.44	13.38	13.45	13.02	11.93	11.87	11.57
Belgium	9.25	9.25	14.40	12.35	12.10	12.75	12.75	12.10	13.25	15.00	17.00
Ireland	6.74	11.83	16.37	13.43	12.72	12.78	12.84	12.83	12.84	12.70	13.85
Italy	12.81	12.81	15.62	16.00	16.87	16.87	16.87	17.69	17.69	19.84	19.84
Netherlands	6.00	9.50	12.75	9.25	8.85	8.75	8.00	8.75	8.75	9.25	9.75
Spain	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13.25
Sweden	9.21	5.84	9.74	12.90	12.90	12.90	12.87	16.85	16.85	15.73	15.73
Argentina	109.06	82.55	71.04	51.03	58.31	60.73	66.19	69.10	90.06	107.97	86.79
Brazil	38.08	41.21	27.84	43.70	50.18	66.34	76.84	78.24	73.58	70.46	71.33
Korea	16.88	17.01	19.53	19.50	19.50	16.35	16.35	18.98	18.98	18.98	18.98
Mexico	n.a.	12.75	17.89	23.42	24.73	25.81	27.73	28.87	28.76	n.a.	n.a.
New Zealand	7.50	10.50	11.25	11.25	11.25	11.25	11.25	11.50	11.25	11.25	11.25
Philippines	10.04	12.08	12.63	12.67	12.70	12.75	12.74	12.65	12.65	12.69	12.76
Singapore	3.17	4.01	6.18	6.99	6.98	6.86	6.77	6.86	6.84	6.60	6.58
South Africa	8.17	7.61	4.30	4.84	5.13	5.71	6.31	6.89	7.59	7.82	7.89

Representative money-market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money-market instruments, other than Treasury bills, at or near end of month

	1977	1978	1979	1980				1981			
	Dec	Dec	Dec	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
United States	6.84	10.57	13.70	12.24	14.24	17.15	17.62	16.67	15.48	14.25	16.80
Canada	7.25	10.62	14.15	11.10	12.50	14.10	17.50	16.95	16.85	17.05	17.55
Japan	5.89	4.64	8.01	11.48	9.57	9.80	9.80	8.32	8.37	7.34	6.76
Australia	9.75	9.10	10.30	12.00	11.70	11.75	13.00	13.25	14.00	15.10	15.75
United Kingdom	6.50	12.50	17.00	15.87	16.62	14.50	14.75	13.19	12.50	12.50	12.37
Belgium	9.50	9.25	14.45	12.60	12.45	13.00	13.10	12.35	13.00	14.00	17.00
France	9.19	6.44	12.62	12.31	11.31	11.44	11.56	11.25	13.50	12.75	13.37
Germany	3.60	3.70	8.70	9.10	9.20	9.45	10.20	9.45	14.50	13.30	12.90
Ireland	6.75	13.00	18.12	13.75	13.37	13.75	13.62	13.87	14.78	14.00	15.37
Italy	11.75	11.37	17.12	18.75	17.75	17.37	17.37	17.37	17.50	19.75	19.75
Netherlands	6.25	10.50	13.00	10.37	9.25	10.00	9.37	9.50	11.25	10.37	11.25
Spain	12.06	22.80	13.20	14.40	15.30	16.00	17.40	17.40	15.00	13.20	13.79
Switzerland	2.02	0.50	6.12	5.87	5.62	6.12	7.50	6.00	8.50	9.37	10.00
Hong Kong	5.73	11.82	14.37	10.44	12.56	15.87	17.69	15.53	16.86	16.27	16.45
Korea	16.88	17.01	19.53	19.27	19.27	16.35	16.35	16.35	16.35	16.35	15.60
New Zealand	11.87	12.00	16.00	14.00	14.25	14.10	14.25	14.35	14.80	15.60	14.70
Philippines	11.96	11.48	10.41	10.97	11.96	13.15	15.01	15.98	16.86	16.63	16.67
Singapore	4.81	7.38	10.12	11.62	13.62	14.12	14.12	14.25	13.69	11.69	10.06
South Africa	9.00	7.85	4.72	5.00	5.05	6.07	7.12	8.42	9.73	9.89	9.84

Commercial bank deposit rates

at or near end of month

	1977	1978	1979	1980				1981			
	Dec	Dec	Dec	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
United States	6.80	10.90	13.55	12.25	14.25	17.07	16.25	16.00	14.75	13.50	16.75
Canada	7.25	10.45	14.05	10.65	12.40	13.95	17.00	16.90	17.15	16.85	17.50
Japan	3.25	2.50	8.37	11.30	9.50	9.90	9.00	8.72	8.25	7.25	7.35
Australia	9.50	8.50	10.25	11.33	10.95	11.21	12.71	12.85	14.14	14.95	16.17
United Kingdom	6.37	12.25	16.81	15.94	16.75	14.44	14.87	13.44	12.37	12.44	12.41
Belgium	9.50	9.87	14.50	12.50	12.13	13.00	12.63	12.13	13.50	15.50	16.75
France	9.00	6.50	12.50	11.75	11.00	11.50	11.25	11.25	12.00	13.00	15.00
Germany	3.40	3.50	7.75	8.40	8.40	8.75	8.00	8.70	13.50	12.50	11.75
Italy	17.00	12.50	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25
Netherlands	7.00	11.62	13.50	10.25	9.75	10.25	9.50	9.62	11.50	10.50	11.50
Austria	9.00	6.75	8.50	11.62	11.50	11.50	11.25	10.00	9.75	11.50	11.75
Denmark	8.00	7.00	10.00	11.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Finland	4.25	3.25	4.25	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Ireland	6.87	12.75	17.87	13.87	13.25	13.75	13.62	13.50	14.62	13.50	15.12
Norway	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Spain	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	12.00
Sweden	7.75	6.25	8.75	9.75	9.75	9.75	9.75	11.75	11.25	11.25	11.25
Switzerland	1.12	0.12	4.75	5.25	5.62	6.12	7.50	6.12	8.50	7.25	8.50
Argentina	n.a.	86.63	72.64	50.61	59.00	62.00	72.00	76.50	97.00	130.00	87.00
Brazil	39.60	46.80	45.00	49.56	54.48	61.20	69.48	72.00	72.84	73.44	75.36
Hong Kong	1.75	4.50	9.25	6.00	9.00	13.00	13.00	13.00	13.25	13.00	13.00
Korea	13.20	15.00	15.00	17.22	17.22	14.82	14.82	14.82	14.82	14.82	14.82
Mexico	11.00	12.00	16.75	20.74	21.74	23.25	26.15	27.13	27.00	n.a.	n.a.
New Zealand	11.00	12.00	15.90	13.05	13.50	13.50	13.50	13.75	14.00	14.50	14.30
Philippines	8.50	8.50	10.50	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Singapore	5.31	7.31	10.31	11.44	13.00	13.50	13.19	12.62	12.19	10.75	9.12
South Africa	8.70	7.30	4.82	4.90	5.10	6.62	7.87	9.25	10.75	10.27	10.87
Venezuela	7.00	7.25	15.00	12.00	12.00	12.00	16.00	16.00	16.00	14.00	14.00

Commercial bank lending rates to prime borrowers

at or near end of month

	1977	1978	1979	1980				1981			
	Dec	Dec	Dec	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
United States	7.75	11.75	15.25	13.00	14.50	17.75	21.50	20.00	19.00	17.00	18.00
Canada	8.25	11.50	15.00	12.25	12.75	14.50	18.25	18.25	18.25	17.75	18.25
Japan	5.47	4.50	6.51	8.99	8.82	8.58	8.16	7.85	7.85	7.85	7.65
Australia	11.50	11.00	10.75	12.50	12.50	12.50	13.50	13.50	13.50	14.25	15.00
United Kingdom	8.00	13.50	18.00	17.50	17.50	15.00	15.00	15.00	15.00	13.00	13.00
Belgium	10.00	10.00	15.25	15.75	15.75	15.75	15.75	15.25	15.25	16.50	19.25
France	11.35	10.95	13.65	13.40	13.40	13.40	13.40	13.40	14.15	14.90	14.90
Germany	6.00	5.50	9.75	11.50	11.50	11.50	11.50	11.50	12.00	13.75	13.75
Italy	16.00	15.00	19.50	19.50	19.50	21.00	20.50	20.50	21.00	22.50	22.50
Netherlands	7.00	12.00	15.00	11.25	10.25	10.75	10.75	10.50	10.75	11.25	11.25
Austria	9.75	8.75	8.50	12.00	12.00	12.25	12.50	12.50	12.50	12.50	12.50
Denmark	12.50	10.00	13.75	14.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75
Finland	8.85	7.87	9.06	9.84	9.83	9.82	9.83	9.84	9.84	n.a.	n.a.
Ireland	8.25	13.75	16.00	15.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50
Norway	8.33	11.00	11.00	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50
Spain	9.00	9.00	9.00	16.02	16.59	17.01	18.50	18.72	16.92	15.46	15.11
Sweden	10.25	8.50	10.75	11.75	11.75	11.75	11.75	13.75	13.75	13.75	13.75
Switzerland	5.75	5.00	5.00	5.75	5.75	5.75	5.75	5.75	6.00	6.50	7.00
Argentina	152.08	86.75	80.00	53.00	60.00	66.00	77.00	81.00	114.00	146.00	90.00
Brazil	52.05	61.70	57.00	57.00	57.00	88.00	88.00	133.75	133.75	133.75	133.75
Hong Kong	4.75	8.75	14.50	10.50	13.00	17.00	17.00	17.00	17.00	17.00	17.00
Korea	15.00	18.50	18.50	21.50	21.50	19.50	19.50	19.50	19.50	19.50	19.50
Mexico	17.00	17.50	19.00	23.51	24.42	24.77	26.25	27.46	27.98	28.59	28.91
New Zealand	8.50	9.75	11.75	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Philippines	14.00	14.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
Singapore	7.02	7.65	9.50	11.30	12.60	13.55	13.60	14.30	14.30	13.68	12.72
South Africa	12.50	11.50	9.50	9.50	9.50	9.50	9.50	10.00	11.00	11.50	11.50
Venezuela	9.50	10.25	13.00	12.00	12.00	12.00	15.00	15.00	15.00	13.00	13.00

Domestic government bond yields

long-term issues, at or near end of month

	1977	*1978*	*1979*	*1980*				*1981*			
	Dec	*Dec*	*Dec*	*Sep*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*
United States	7.97	9.00	10.20	11.90	12.33	12.25	11.46	12.76	13.16	13.21	14.13
Canada	8.77	9.68	11.32	12.98	13.22	13.01	12.69	12.96	13.38	13.48	15.07
Japan	6.40	6.40	8.63	8.92	8.84	9.26	9.04	8.84	8.89	8.67	8.84
Australia	9.50	8.90	10.45	12.00	12.40	12.60	13.00	13.10	13.10	13.10	13.10
United Kingdom	10.53	12.75	13.83	12.69	12.52	12.65	13.05	13.25	13.36	12.86	13.18
Belgium	8.76	8.80	11.13	12.43	12.46	12.61	13.04	13.19	13.44	13.57	13.52
France	11.07	9.94	12.59	13.85	14.27	14.24	14.31	14.58	15.05	14.98	14.95
Germany	5.52	6.65	7.91	8.24	8.55	8.59	9.19	9.07	10.38	9.97	10.12
Italy	10.82	10.89	11.28	12.12	12.53	12.42	12.12	12.44	12.88	14.46	14.53
Netherlands	8.11	8.48	9.29	10.25	10.20	10.46	10.48	10.43	10.96	11.38	11.29
Austria	9.00	7.91	8.20	9.61	9.90	10.11	9.62	9.80	10.06	10.33	n.a.
Denmark	16.83	17.27	18.28	20.29	19.24	19.40	19.62	18.56	18.90	19.12	19.23
Finland	10.25	9.19	9.58	10.35	10.48	10.43	10.42	10.92	10.92	10.96	10.97
Ireland	11.30	13.44	16.64	14.57	14.77	14.91	15.63	16.22	16.01	16.12	n.a.
Norway	8.37	8.19	10.04	n.a.	10.40	10.44	10.44	11.70	11.50	11.57	13.00
Spain	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	11.65
Sweden	9.84	10.09	11.22	12.63	12.68	12.71	12.61	n.a.	n.a.	n.a.	n.a.
Switzerland	3.75	3.03	4.20	4.85	4.69	4.67	4.63	4.79	5.20	5.40	5.79
Argentina	181.65	112.18	47.94	40.46	38.21	101.38	36.84	34.97	42.99	66.43	65.64
New Zealand	10.00	10.02	12.98	12.98	12.96	12.96	12.99	12.81	12.97	12.88	n.a.
Philippines	13.40	13.40	13.20	13.40	13.40	13.40	13.40	13.40	13.40	13.40	13.42
South Africa	10.75	9.85	9.44	10.62	11.10	11.75	11.80	12.67	12.77	12.77	12.80
Venezuela	7.24	7.24	7.29	7.40	7.40	7.43	7.39	7.44	7.40	7.30	10.00

Domestic corporate bond yields

long-term issues, at or near end of month

	1977	*1978*	*1979*	*1980*				*1981*			
	Dec	*Dec*	*Dec*	*Sep*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*
United States	8.30	9.25	10.75	12.88	13.38	13.38	13.00	13.63	14.13	14.00	15.00
Canada	9.71	10.34	12.07	13.74	13.95	13.72	13.62	13.84	14.34	14.41	16.03
Japan	6.68	6.94	8.34	8.44	8.48	8.60	8.60	8.49	8.25	8.15	7.95
Australia	11.00	10.25	11.65	13.35	13.75	14.00	14.25	14.25	14.10	14.25	14.50
United Kingdom	11.88	13.53	14.96	13.78	13.61	13.63	14.21	14.20	14.14	14.35	14.44
Belgium	9.85	9.58	11.93	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
France	12.09	10.27	12.92	14.03	14.69	14.83	15.23	14.62	15.13	15.39	15.39
Germany	5.92	6.80	8.20	8.40	8.80	9.30	9.50	9.50	10.00	10.90	10.90
Italy	10.71	10.12	10.22	13.31	12.64	12.65	12.99	12.80	13.05	16.82	17.01
Netherlands	7.90	8.62	9.95	10.49	10.48	10.33	10.71	10.46	10.77	11.21	11.07
Norway	8.59	8.37	10.53	n.a.	10.55	11.24	11.24	11.75	12.07	12.36	12.76
Spain	11.58	12.17	11.77	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweden	9.83	10.03	10.21	11.94	11.99	12.10	11.95	13.37	13.46	13.56	13.63
Switzerland	4.96	4.85	5.53	5.83	5.71	5.78	5.63	5.78	5.93	6.08	6.08
Korea	19.60	24.00	32.50	26.00	26.00	23.50	26.30	26.30	24.70	23.00	22.30
Mexico	17.56	20.37	21.99	26.13	26.12	27.55	28.03	28.33	30.90	30.20	30.97
Venezuela	10.39	12.43	14.55	12.40	13.55	14.78	16.15	16.65	16.20	16.00	16.25

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World Financial Markets

Morgan Guaranty Trust Company of New York

June 1981

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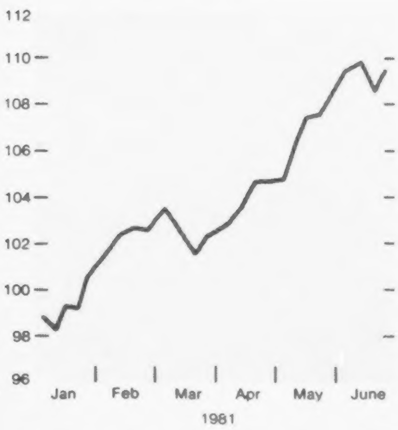
Nominal effective dollar exchange rate
weekly averages
index, March 1973=100



The dollar and interest rates

The dollar has receded only slightly from the highs recorded earlier this month against the major currencies, mainly in response to declines in U.S. and Euro-dollar interest rates. On a nominal effective basis, the dollar has dropped less than ½% from the peak reached earlier this month. However, the dollar still is 10½% above its level at the beginning of this year, at which time U.S. and Euro-dollar interest rates were at or above current levels and interest differentials generally were more favorable to the United States (see Table 1). Thus, while interest rates have had a strong influence on dollar exchange rates, many other factors, such as the overall shift in U.S. economic policy, the improving trend in U.S. inflation, the relative strength of the U.S. current account position, and unsettling political developments abroad, have contributed to the dollar's strong performance.

The rate for Federal funds has lagged the decline in other U.S. interest rates. Until a few days ago Fed funds continued to trade at around 19%, scarcely changed from earlier highs. Even with the recent drop, the rate is above the 17% average level in the first five and a half months of this year. The continuation of such a high funds rate reflects the Federal Reserve's resolve to control the growth of the monetary aggregates. The growth of M1B has moderated significantly in recent weeks, and this narrow aggregate is now slightly below the lower end of the Federal Reserve's annual target range. The wider aggregates M2 and M3, however, are still slightly above their annual target ranges (see chart). The Federal Reserve appears determined to maintain a relatively taut rein on bank reserve availability until all the aggregates are more firmly under control. Non-borrowed reserves, which the Federal Reserve targets for operating purposes, have been virtually flat since mid-April. Recently, banks' borrowings at the discount window have risen to high levels, but the Federal Reserve apparently is pressuring banks to curb their resort to the discount window, especially when this is done to avoid higher-cost market funding.

In keeping a tight rein on reserve availability, the Federal Reserve is mindful of the excessive ease in bank reserve positions which occurred in the spring and summer of 1980 and to a much lesser extent during late winter of this year, leading in both instances to a rapid decline in interest rates and an acceleration of money supply growth. The Federal Reserve, determined to establish its credibility, seems anxious to avoid a repetition of this experience. By being cautious now it may better ensure that its monetary growth targets for the year will be achieved. If the Federal Reserve were to ease now, the effects would be felt late this year, just when the economy is likely to be picking up under the impetus of tax cuts and increased defense spending. This could lead to a renewed surge in money supply growth and a repeat of last year's experience. Through long-lasting restraint the Federal Reserve also hopes to make more permanent inroads into inflation and inflationary psychology. Furthermore, with the budget process far from complete and with the ultimate outcome still uncertain, the Federal Reserve wants to show firm monetary restraint.

Other U.S. money market rates are down by 150 basis points or more from last month's peaks. Short-term commercial paper rates have declined to 16% from the 18% level reached last month, and rates for 3-month Euro-dollar deposits have fallen to 18½% from 20%. Bank prime rates have lagged, currently at 20% versus an earlier 20½% level. Long-term bond yields have declined by up to 100 basis points during the past month or so.

These declines in interest rates partly reflect a slowing of economic activity and a deceleration of inflation. Economic activity has slowed significantly from its rapid pace at the beginning of this year. Real GNP growth in the second quarter probably has been flat or only marginally positive. Industrial production in April-May was only 0.5% above the first-quarter level. Retail sales volume has been essentially flat for several months. Housing activity has slumped in the face of high mortgage rates. At present there is little reason to expect that the economy will show much strength in the third quarter. The rate of inflation has diminished, as reflected in the slower annual rates of increase in the consumer price index (6.6% in April-May) and the producer price index (7.3% in April-May). Prospects are good for a continuation of this improved price performance, with inflation averaging perhaps 7%-8% over the next twelve months. This could virtually eliminate the overall U.S. inflation differential.

Against this background, U.S. interest rates are likely to decline further in the months ahead. Present U.S. interest rate levels incorporate a very large inflation premium (at least on a before-tax basis). Given the prospect of more moderate inflation, nominal interest rates could be expected to decline. However, the decline may be quite gradual. As noted earlier, the Federal Reserve is likely to hold steady with its restrictive monetary stance, particularly with the outlook for fiscal restraint still hanging in the balance. Moreover, there is a longer-run concern about a potential conflict between the targets for monetary aggregate growth and the prospects for nominal GNP growth. Resolution of this potential conflict may entail a continuation of relatively high interest rates in both nominal and real terms for some time to come.

Europeans and the Japanese have been complaining about both the high level and the volatility of U.S. interest rates, especially because of their impact on exchange rates. They have been unhappy about the extent of recent weakness of their currencies *vis-à-vis* the dollar and the need to boost domestic interest rates to high levels in real terms in the midst of recession and rising unemployment. Nevertheless, there is

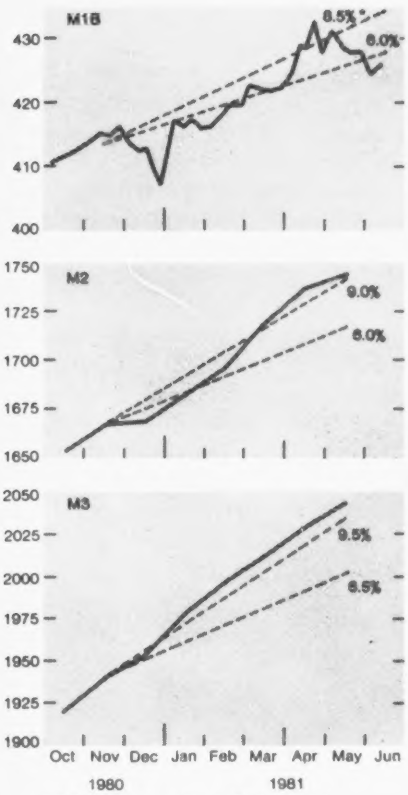
Table 1

Exchange rate changes from January 2 to June 25, 1981

percent vis-à-vis the dollar and on a trade-weighted average basis

	vis-à-vis *dollar*	*trade-weighted average basis*
Dollar	—	10.5
Canadian dollar	—0.5	2.1
Japanese yen	—10.2	—3.8
Belgian franc	—18.7	—1.7
Dutch guilder	—19.4	—3.3
French franc	—20.0	—4.8
German mark	—17.4	—1.5
Italian lira	—20.7	—5.8
Swiss franc	—12.7	3.9
British pound	—18.0	—5.2

U.S. money supply and target ranges
in billions of dollars



*Adjusted for transfers to NOW accounts

widespread support among foreign central banks for the basic thrust of U.S. monetary policy. Speaking at the recent Annual General Meeting of the Bank for International Settlements, Dr. Zijlstra noted the very great importance of the fight against inflation being waged in the United States and stressed his support for the determination of U.S. authorities to bring down inflation. He further stated that, "A sine qua non for controlling inflation, both in the United States and elsewhere, is control over domestic monetary aggregates."

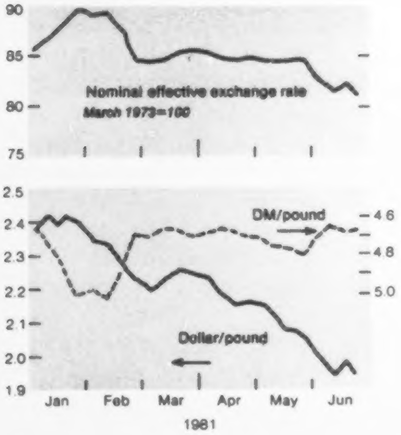
However, Dr. Zijlstra and other foreign officials have been critical of the degree of importance attached to short-term variations in the money supply in the United States. They caution against reacting to weekly, monthly, or even quarterly movements in the monetary aggregates, partly because of imperfections in monetary data, the effects of rapid financial innovation, and the potentials for large and unexpected shifts in the demand for money. They warn that seeking too close a control over the growth in the monetary aggregates in the short run may make interest rates and exchange rates unnecessarily erratic and volatile. Thus, they urge that the Federal Reserve pay attention only to movements of the aggregates over longer periods, such as a year.

This viewpoint is understandable and contains elements of truth. Indeed, the Federal Reserve would like to be free of pressures to focus on short-term movements in the aggregates. However, these arguments fail to take sufficient account of the realities in the U.S. marketplace, where participants are continuously searching for indications of shifts in monetary policy and many are still skeptical of the Federal Reserve's willingness to stay on course, particularly in the face of a slowdown in economic activity and a rise in unemployment. Eventually market participants may become firmly convinced of the Federal Reserve's resolve, but its credibility is not yet sufficiently established to provide the Federal Reserve with the same degree of freedom that some European central banks have to permit deviations of money supply growth from targets over shorter periods of time without arousing doubts about longer-run performance. Furthermore, the Federal Reserve's own analysis suggests that, once money growth is off target, the faster it attempts to move back toward the longer-run target, the more likely is the longer-run target to be achieved.

Europeans also have criticized the United States for relying too heavily on monetary policy to fight inflation and not enough on fiscal restraint. This same concern about the policy mix and its implications for interest rate levels has been expressed in the United States and underlies some of the skepticism Wall Street has accorded the Reagan Administration's budget proposals and Congressional action on them. However, the U.S. government is now committed to go further than virtually any European government in cutting back the growth in social spending and transfer payments. In this effort, it is receiving surprisingly broad support from the Congress. Moreover, even with the Administration's tax-cut plans and proposed acceleration of defense spending, the prospective U.S. budget deficit is smaller in relation to GNP than the government budget deficits of most European countries.

Another consideration raised by some observers concerning the high level of interest rates in the United States, and one which has some validity from the European viewpoint, is the extent of the tax-deductibility of interest costs and the taxation of interest income in the

British pound
weekly averages



United States. This tax treatment of interest expense and income, which contrasts considerably with that in Europe, especially for the consumer and homeowner, means that the United States requires relatively higher interest rates than elsewhere to restrain expenditure and to reduce inflationary expectations. However, it would be politically very difficult to significantly alter this tax treatment.

Under all these circumstances, especially given the importance of fighting inflation, the critical stage of fiscal policy, and the need to firmly establish its credibility, the Federal Reserve has no choice but to hold to a tough restraint policy in the short run as well as over the longer term.

Sterling

In recent weeks the British pound has weakened not only against the dollar, but also on an effective basis. The pound has been declining against the dollar since the beginning of this year, when it was trading above $2.40. However, until recently it had slipped only marginally on a nominal effective basis because sterling had remained firm in relation to other European currencies (see chart). It is only since May that the pound has also declined against European currencies as well as the dollar. Nevertheless, the pound's effective depreciation since the beginning of this year still amounts to less than 5¼%. In real effective terms, the pound's drop has been slightly larger, reflecting Britain's much improved relative price performance as well as the nominal depreciation.

The latest weakening of the pound was triggered by oil price developments particularly the $4.25 per barrel reduction to $35 in the official selling price of North Sea oil. This oil price reduction, together with Britain's adverse interest rate differential, caused a large increase in capital outflows. British officials have not resisted this latest weakening of sterling either by intervening or by pushing up domestic interest rates.

The reduction in the price of North Sea oil, if sustained, will affect the United Kingdom in a number of ways. Obviously, it has altered market perceptions of sterling's prospects. The sharp rise in oil prices during 1979-80 and the emergence of the United Kingdom as a modest net oil exporter were factors that contributed importantly to the strength of sterling, even in the face of persuasive evidence of the currency's substantial overvaluation in terms of international price and cost competitiveness. Now that prop has been weakened.

The decline in the price of North Sea oil could trim Britain's net oil trade surplus by roughly $600 million in the second half of this year. Although the U.K. net oil imports are still expected to average between 150,000 and 200,000 barrels per day, the price differential between the high quality North Sea oil which Britain exports and the lower quality oil it imports may be trimmed from nearly $5 per barrel in the first five and a half months of 1981 to less than $1.

The reduction in the price of North Sea oil will contribute to an erosion of Britain's large current account surplus during the second half of 1981. As a consequence of civil service strikes, no trade figures have been released beyond those for February. However, on the basis of the first two months' trade returns and a first-quarter increase in the net invisibles surplus, it appears that Britain's current account surplus exceeded $4 billion in the first quarter after seasonal adjustment. This surplus is likely to narrow significantly during the remainder of the year, not only because of reduced net oil exports, but even more importantly, because of the cumulative effect of sterling's high real effective exchange rate and a gradual turnaround in the U.K. economy. Even with the decline so far this year, the real effective exchange rate for the pound is still 34% above its 1975-79 average level. The two-year decline in economic activity also appears to be ending. This is largely the consequence of a slowing in the rate of inventory decumulation, although a recovery in final demand is still some way off. As a result, any upturn in output may be weak and short-lived. However, given the high import content of inventories, the current account — although it may be in surplus by $8 billion for the year as a whole — could weaken toward equilibrium by year-end and remain in rough balance during 1982. But while the current account position will provide less support to sterling in the future, it is still not likely to prove a significant source of weakness.

Also tempering sterling weakness is the likely course of interest rate differentials. Since November 1980, the Bank of England has lowered its minimum lending rate from 16% to 12%. The accompanying decline in market rates, combined with the increases abroad, has resulted in an unfavorable shift in interest rate differentials and very large capital outflows. With the economy bottoming out and money supply (adjusted for the effects of the civil service strike) growing within target bands, interest rates could remain largely unchanged in coming months. As interest rates abroad are likely to decline eventually, U.K. interest differentials could narrow later in the year.

Sterling will also receive support from the continued determination of the Thatcher government to adhere to its current anti-inflationary policies. There has been no shift in the basic thrust of fiscal policy, aimed at curbing government expenditures and reducing the public-sector borrowing requirement. The government's resolve has been strengthened for the time being by the indications that the recession may have troughed. With nearly three years until the next general election must be held, concern over electoral prospects is not yet likely to trigger a policy change.

While these factors will support sterling in the intermediate term, the exchange rate is likely to weaken significantly over the longer term. The pound remains uncompetitive at current exchange rate levels. Although inflation has been at single-digit rates most months for the past year, indirect tax increases have left the 12-month rate at 11¾%. There is scant prospect that this uncompetitiveness can be remedied through a sustained inflation performance superior to that of Britain's trading partners. One factor helping to moderate inflation has been the strengthening of the nominal effective exchange rate during the two years to end-1980. Even if sterling maintains its current nominal rate, this source of relative price stability is past. Any further softening of the effective rate, such as that since the start of the year, will reinforce the effects of inflation abroad on Britain's rate. In the three months ended May, for instance, the index of raw materials and fuels prices, which is heavily influenced by import costs, rose at more than a 20% annual rate. As these price increases work through into final product prices, they will tend to offset the favorable influence of the deceleration in wage costs during the current wage round. As a consequence, the prospects for Britain's twelve-month inflation rate falling much below the current 11¾% have been reduced.

It is also unclear whether the recent trend of single-digit wage settlements can be sustained over the longer term. With inflation lower and unemployment much higher than a year ago, the outlook for the next wage round — beginning this August — looks encouraging in this regard. However, a pickup in economic activity next year may well be accompanied by a resurgence of high wage claims as workers seek to recoup losses in real incomes now beginning to occur. Although the short-term impact of higher settlements will be partially offset by a cyclical improvement in productivity, over the longer term higher wage claims will foster higher inflation. As a consequence, most of the necessary downward adjustment in the real effective exchange rate will necessarily come through currency depreciation.

The French franc

François Mitterrand's defeat of Valery Giscard d'Estaing in the May 10 French presidential election set off a strong wave of French franc selling. The franc's cross-rate against the German mark in the EMS, near the central parity at 2.37 on May 8, fell immediately to its floor of 2.41 on May 11. The weakness of the franc, together with general dollar strength, pulled the whole EMS block down against the dollar. On June 25, the franc/mark rate stood at 2.39. The franc/dollar rate was 5.70, off 6.3% from 5.34 on May 8. On a nominal effective basis, the franc has depreciated by 1.9%.

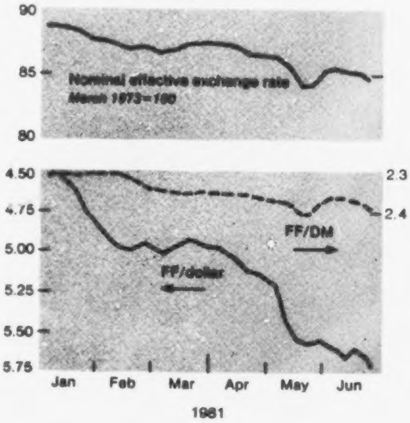
President Mitterrand took an immediate decision to defend the franc within the EMS. Apart from massive market intervention — $6 billion in May out of total foreign exchange reserves (excluding large gold holdings) of $27 billion — the two main defenses for the franc are tighter exchange controls and sharply higher interest rates.

The new exchange controls are mainly directed at French residents, rather than at foreign holders of francs. "Leads and lags" against the franc were restrained by reducing from six months to one the grace period for receipt of export payments, and by preventing prepayment for imports by more than one month rather than two. Purchases of foreign exchange by French residents for overseas investment have to be made from the pool created by residents' sales of existing overseas assets, rather than freely on the exchange market. Border surveillance to prevent illegal physical export of currency has been stepped up. The 5% reserve requirement on foreign deposits in France, introduced last November to weaken the franc when it was at the top of the EMS and the mark was needing support at the bottom, was abolished.

The Bank of France's money market intervention rate, raised from 12½% to 13½% a few days before the May 10 election, was raised in three large steps within two weeks to 22%. Reserve requirements on domestic bank deposits were raised by 1%. Call money settled down at a 20% rate, versus 13½% before May 10. Other money market rates and bond yields have also risen sharply.

Despite these measures the franc remains weak, although intervention has been modest since late May. The continued pressure on the franc is shown by the 6% premium over the spot foreign exchange rate in the foreign currency investment pool. Moreover, Euro-franc rates are several percentage points above domestic money market rates. This differential is possible because of the new exchange controls that have fragmented the domestic and external French franc markets.

French franc
weekly averages



Fear of the left

Three primary forces underlay the attack on the French franc. First, the simple shock of Mitterrand's victory, which was not widely anticipated, drained confidence in the franc. Adding to this was concern about past and potential future links between the Socialists and the French Communist party, the most pro-Soviet in Western Europe. Second, the Socialist economic program appears likely to worsen inflation in France and prolong large balance of payments deficits. Third, Socialist proposals for the nationalization of industrial groups and banks could reverse the liberalization of markets and prices and the enhancement of competition that have been a major achievement in the last five years.

The immediate shock of Socialist victory quickly receded, and some of the fear of Communist influence on the government was reduced by the Socialist party's achievement of an absolute majority in the mid-June National Assembly elections and by the slump in the Communist party's electoral support from over 20% in the past to 15%-16%. But Mitterrand's decision to include four Communist ministers in minor government posts was a reminder of the strong leftist orientation of the Socialist party and its supporters, even though moderates continue to occupy the key posts.

Reflation and redistribution

The immediate focus of concern for the franc is now switching to the effects on inflation and the current account deficit of the Socialist program to combat unemployment, which was 7.7% of the labor force in May compared with 6.2% a year earlier. The measures to stimulate economic growth are also intended to reduce inequality of income distribution, which is greater in France than in other advanced industrial countries. Measures affecting labor include a 10% increase in the minimum wage, 3.3% of which was the regular quarterly inflation adjustment, and an intended move over five years to a 35-hour week and five-week annual vacations, the latter two policies to "spread" work. On the fiscal front, the government has announced substantial public-sector job creation, and is raising minimum pensions by 20% and family and other social benefits by 25%. To offset the minimum wage increase, social security taxes on employers will be reduced for employees earning less than 120% of the minimum. The cost of these measures is to be partly offset by a surtax on high incomes, extra taxes on banks and oil companies, and an increased value-added tax on some luxuries. Monetary loosening so far only involves a ½% relaxation of credit ceilings for June, but subsidized credits to selected sectors of industry are to be raised from 13 billion to 17 billion francs.

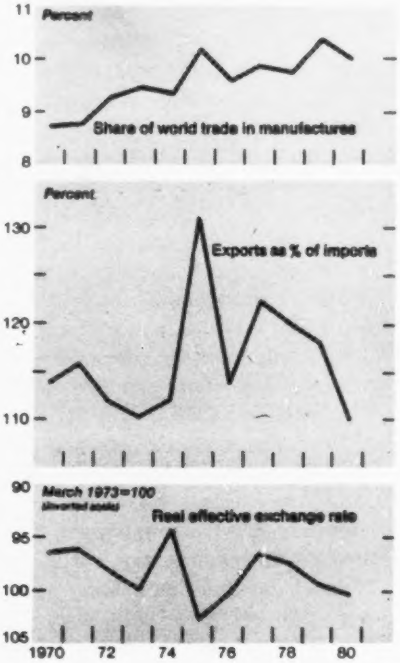
The background to these measures, and the rise in unemployment, is that French economic growth has deteriorated since 1974, 2.7% a year versus 5.4% in 1960-74, while labor force growth has been comparatively vigorous at 0.8% a year. The economy has been in outright recession since the spring of 1980: industrial production in April, 1981 was down 8.1% from twelve months before, although the March/April average was slightly above January/February. GDP in the first half of 1981 is estimated to be 1% below the first half of 1980, and the full-year result could be down ½%, even assuming some impact from the new reflationary measures. These measures could bring about a consumer-led recovery over the next twelve to eighteen months, provided the expansion is not choked off by high interest rates. A favorable response from business investment is likely to be delayed, and weak when it comes. Investment plans are currently being cut back in response to low profits and capacity utilization in the recession, and business confidence is unlikely to be strong in the new environment of impending nationalization.

France's endemic inflation is likely to be worsened by the new policies. Consumer prices have risen 11% a year in 1974-80, and over the twelve months to May 1981, the rise was 12.7%, worsened by unfavorable oil shock effects. Inflation is likely to be directly affected by wage cost increases, as the higher minimum wage will probably be partly reflected in wage differentials up the scale. The rapid expansion of consumer demand, and the increased government deficit, likely to be 57 billion francs or 2% of GDP this year versus 51 billion without the measures and 32 billion last year, must also be inflationary. While a government deficit of 2% of GDP is low by European standards, French experience in the late 1970s, when the deficit averaged less than 1% of GDP but inflation was high, shows that inflationary tendencies are strong even with relatively conservative public finance. Moreover, inflationary responses are now so embedded in labor and management behavior that any expansion of the government deficit will aggravate them. Nor is monetary restraint necessarily going to be maintained. The money supply already had expanded at a 16% annual rate in the first three months of 1981, against the target of 10%, after undershooting 1980's 11% target. Relaxation of credit ceilings in June, the monetary impact of the increased government deficit (particularly in an unfavorable climate for selling bonds), and the need to lower interest rates soon to facilitate the expansion all suggest an overshoot of this year's target. The rate of inflation could well stay in the 12%-13% range for the forseeable future. Because other countries' inflation rates are for the most part expected to decline, France's adverse inflation differential is likely to worsen.

France's current account deficit could also get relatively worse. In the first quarter of 1981, the deficit was at an $8.3 billion annual rate, versus $7.4 billion in 1980, but this worsening was probably reversed in the second quarter, considering the favorable trade figures for April and May. Although the recession is trimming import volume relative to exports, the unfavorable terms of trade effect of the depreciation of European currencies against the dollar has offset this. Because France's intended expansion could precede an upturn elsewhere in Europe, imports may grow faster than exports in the months ahead, while the terms of trade are unlikely to improve much.

Strong price and cost competitiveness for French industry will be needed to ensure better trade and current account figures in the future. While the 1980 worsening of the French current account, by $8½ billion from 1979, was less than the impact of higher oil prices, a simultaneous deterioration of manufactures trade was masked by sharp improvements in agriculture and invisibles. This manufactures worsening was caused by the steady erosion of French competitiveness in 1977-79, as shown by the rising real effective exchange rate (see chart). In general, export/import ratios in manufacturing and France's share of world trade in manufactures have been sensitive to shifts in price competitiveness. Boosts to manufactures came in 1975, in response to the 1974 downward float,

France: competitiveness and trade in manufactures



and in 1977, in response to the devaluation of summer 1976. The real effective exchange rate of the franc, 2.3% lower than on May 8 and 4.8% below the 1975-79 average, is probably competitive enough at present. The danger is that adverse growth and inflation differentials in the future could prevent the current deficit from improving, and possibly widen it.

Nationalization and structural change

The Socialist approach to the longer-term restructuring of the economy in the three areas of energy, nationalization, and financial markets could operate to harm competitiveness and the balance of payments.

First, the replacement of high-cost imported oil and gas by expanded nuclear generating capacity will be slowed. Instead of the previous goal of meeting 30% of 1990 energy requirements from this source, the new government's target is 21%. The new plan is comparatively vague, and emphasis is to be placed on conservation and a large commitment to solar energy.

The second longer-term concern is that the proposed extensive nationalization of major industrial groups, now facilitated by the Socialists' Assembly majority, could undo the benefits of the Barre plan. Under this plan, initiated in 1977, the French authorities abandoned price control on industry and margins control in much of the distributive trades, and generally stepped back from industrial intervention while attempting to encourage competition through anti-trust action and reduced protection. Industrial development is now being determined to a greater extent by the free play of relative prices and costs, leading to better allocation of resources, more rapid adjustment to high energy costs and changes in France's comparative advantage, and fuller integration into the world economy. Nationalization, which could double the one-fifth share of French industry now in state hands, could mean a return to the traditional, centralized direction of the French economy, with increased bureaucratic rigidity and planning. Industrial competitiveness would be bound to suffer.

Third, the new exchange controls and proposed takeover of all remaining private banks and insurance companies could undermine the establishment under Barre policies of broader, deeper, and more integrated financial markets. An immediate payoff was realized from this last year when the whole government deficit (32 billion francs) was funded in the domestic bond market, permitting much enhanced monetary control. Moreover, a significant proportion of these bonds was bought by overseas investors, particularly in OPEC, thereby helping finance the current account deficit. The exchange control measures have split the domestic money market from the Euro-franc market, and introduced a dual exchange rate through the foreign currency premium. The takeovers would give the government a monopoly in the granting of credit and a captive market for its bonds.

The policies of the new French Socialist government augur for prolonged weakness of the franc, after the stability of the Barre years. Socialist commitments to nationalization could reverse the liberalization and market orientation of recent years, which have improved the productivity, competitiveness, and financing of the French economy. The policy of combatting unemployment by stimulating higher wages and a consumer-led expansion will aggravate France's inflation and current account deficit. Domestic interest rate policy, if it is to avoid thwarting the reflation, is likely to discourage the substantial capital inflows that have supported the franc in the last year and a half. As well as raising the prospect of currency realignments within the EMS, these policies put in question the achievement of the system's principal objectives: convergence and lowering of inflation among member countries, and the fuller economic and monetary integration within Europe.

Oil prices sliding

In the few weeks since the Geneva OPEC meeting, world oil prices have continued to weaken. The lack of agreement on a unified price structure during the meeting and Saudi Arabia's continuation of a high rate of oil production have intensified market pressures for new substantial price reductions. Unlike earlier in the year, when most of the declines involved spot prices and the elimination of surcharges, the most important reductions since the OPEC meeting have occurred in official prices—primarily the United Kingdom's $4.25 price cut to $35, Mexico's $4 cut to $34.50 (although this may be rescinded) and Norway's $4 reduction to just under $36. These developments have further increased the pressure on OPEC official prices. This is being felt mainly by Algeria, Nigeria, and Libya whose official prices remain at the $40-$41 range for crude of similar quality to that of the North Sea, as well as by some Middle Eastern OPEC members. High-priced oil-exporters unwilling to cut prices have had to cut production. Nigeria's output is reportedly down by more than 50% from last January's level of 2.1 million bpd, Libya's has fallen by 30%, while Algeria's and Kuwait's have declined by more than 10%. Mexico's statement that it intends to restore the $4 it cut earlier from its price has already begun to affect sales.

While a significant cutback in Saudi Arabia's oil production could help stem the pressure on oil prices, it has indicated that this will take place only after there have been reductions in some of the high official OPEC prices. Oil consumption in industrial countries continues to fall — not only on a year-over-year basis, but also relative to the earlier part of 1981, since it is now at its seasonal low period. Economic activity in industrial countries remains weak, while their oil stocks are high.

The strong dollar is having an additional impact on world oil markets. First, it causes an increase in oil prices in those countries whose currencies are weakening, thus inducing further conservation. For example, in spite of the steady, albeit small, decline in the effective OPEC oil price since January 1981, the price of oil in DM terms has actually risen by 12% (see Table 2). Second, the strength of the dollar is increasing the purchasing power of OPEC members' oil revenues. As the table shows, it has actually led to a nearly 5% rise in the *real* price of oil, in dollar terms, since January despite the drop in nominal oil prices.

The current weakness in oil markets is also having an impact on the oil-exporters' views about the longer-term trend in oil prices. Recent press reports have indicated that other OPEC members, such as the United Arab Emirates and Venezuela, have joined Saudi Arabia in thinking that the oil price increases of 1979-80 went too far, having caused a significant and lasting reduction in world oil consumption, and in calling for stability in oil prices for the next few years.

These new developments could lead to an even greater reduction in the OPEC current account surplus

Table 2

Oil price trends

monthly average prices as index numbers

	OPEC effective oil price in:			Real oil price in $[1]
	$	DM	yen	
Dec 1980	100	100	100	100
Jan 1981	105	107	102	104
Mar 1981	104	111	104	106
May 1981	103	120	108	109

[1] OPEC effective oil price in dollars divided by an index of wholesale prices of manufactures in industrial countries. The latter is expressed in dollar terms and is weighted by the share of these countries' exports in OPEC imports.

than was indicated in last month's issue. The decline could well begin as early as the second half of 1981, depending on the size and timing of adjustments in OPEC official prices and production.

At present, every $1 cut in the effective OPEC price implies an $8 billion reduction in annual OPEC revenues, while every 1 million bpd drop in annual oil exports lowers these revenues by as much as $12 billion. In the event that Saudi Arabia's efforts to bring down some of the high OPEC prices succeed in the second half of 1981 and the range of official OPEC prices drops to $34-$37 per barrel, from the present $32-$41, the effective OPEC price for 1981 would average under $35 per barrel. Allowing for a significant reduction in Saudi oil production, the 1981 OPEC current account surplus would fall $20-$25 billion, to $85-$90 billion before official transfers, from the $110 billion of 1980. After these transfers, it could be on the order of $80 billion or less. Alternatively, should Saudi Arabia's strategy succeed even more and official OPEC prices in the second half of 1981 fall to a $32-$35 range, the effective OPEC oil price for 1981 would be just over $34 and the drop in the OPEC surplus this year would be even larger, to $70 billion or less after official transfers.

Further major declines in the OPEC current account surplus could occur in the years ahead. The likelihood of a moderate economic recovery next year together with the continuing effect of the 1979-80 oil price increase on oil consumption are likely to keep demand for OPEC oil in 1982 relatively weak, and contain the rise in oil prices, if any, to perhaps no more than the rate of inflation. This and an OPEC import volume growth similar to this year's 15%-16% could reduce the 1982 OPEC current account surplus to $65-$70 billion before official transfers (around $60 billion after these transfers).

Beyond 1982, the likelihood of continued sluggishness in oil consumption in the industrial countries suggests that, in the absence of political upheavals and oil supply disruptions, the OPEC current account surplus could keep falling. It may be down to $45-$50 billion before official transfers in 1983 and to $30-$35 billion in 1984, assuming that oil prices during this period rise by 2%-3% per annum in real terms and that OPEC import volume growth averages 13%-14% per year. Under these assumptions the OPEC surplus could be around $20 billion by 1985.

Statistical appendix

for key to data in tables see January 1981 issue.

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Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

Effective exchange rates

Index numbers, March 1973=100. The index of the effective exchange rate for a currency is a measure of that currency's trade-weighted average appreciation or depreciation vis-à-vis the currencies of 15 other major countries. The exchange rates used in the construction of this index are the averages of daily noon spot exchange rates in New York for months and for weeks ending on dates shown. The trade weights used are based on 1976 bilateral trade in manufactures.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
pre-June 1970 parities	118.5	94.9	79.3	116.2	91.6	97.5	110.9	95.9	98.2	88.3	97.8	97.9	98.1	102.2	92.2	98.4
Smithsonian central rates	107.0	101.3	88.7	116.0	95.4	96.1	108.3	97.0	99.1	91.6	98.0	96.0	96.3	100.5	91.7	98.1
1980																
June	96.2	84.9	113.8	78.7	137.9	90.6	53.1	110.8	118.6	164.3	121.7	92.0	103.0	87.8	74.8	71.4
July	96.0	84.8	111.7	79.3	138.2	91.1	52.7	110.9	119.1	165.5	122.2	92.5	102.8	87.8	75.1	70.0
August	97.2	84.5	111.1	80.5	137.2	90.7	52.7	110.2	119.0	163.8	122.0	91.8	103.3	88.2	75.7	69.6
September	96.4	83.9	115.8	81.4	137.0	90.4	52.4	109.9	119.1	164.7	121.8	91.4	103.3	88.2	75.4	68.4
October	96.8	83.6	119.4	83.2	135.4	89.9	52.0	109.1	118.3	165.5	121.0	90.5	103.2	88.7	75.4	68.3
November	98.9	82.7	118.8	84.9	134.3	89.0	51.7	108.3	117.7	164.5	119.9	89.5	103.6	89.0	76.1	68.6
December	99.9	82.2	122.0	84.8	133.9	88.7	51.4	107.8	117.0	162.5	119.8	89.4	102.6	88.9	76.6	67.5
1981																
January	99.4	82.5	126.7	87.8	132.8	88.3	51.0	107.2	116.2	160.9	119.4	88.0	101.7	88.8	76.6	66.3
February	102.3	82.5	127.3	87.7	131.7	87.1	50.3	106.3	115.0	159.1	118.8	86.4	103.1	90.2	77.4	65.9
March	102.5	83.1	125.5	85.1	134.0	87.0	49.6	106.1	114.8	160.5	119.8	86.2	103.7	90.1	78.1	65.8
April	104.2	83.5	123.0	84.8	133.8	86.7	48.6	106.2	114.4	160.3	120.1	85.7	104.6	90.5	79.0	65.8
May	107.3	83.4	122.2	84.8	132.6	84.8	48.3	106.3	113.3	160.8	119.5	84.7	105.7	90.9	80.3	66.2
1	104.8	83.3	124.1	84.7	133.5	86.2	48.5	106.7	113.8	159.9	119.9	85.2	104.7	90.8	79.2	65.8
8	106.3	83.2	123.5	84.8	132.8	85.6	48.3	106.4	113.7	159.2	119.7	84.9	105.6	90.7	79.7	66.0
15	107.4	83.4	122.4	84.7	132.7	84.0	48.5	106.5	113.5	160.7	119.9	84.9	105.9	91.0	80.3	66.3
22	107.6	83.4	121.8	84.8	132.4	84.0	48.4	106.5	113.4	162.5	119.8	84.9	105.8	91.1	80.5	66.4
29	108.2	83.5	120.8	84.8	132.0	85.2	48.1	105.9	112.9	162.2	119.0	84.3	105.6	91.0	80.9	66.1
June 5	109.3	83.4	121.5	82.9	131.6	85.3	47.9	105.9	112.9	162.6	119.3	84.3	105.5	91.2	81.5	65.9
12	109.9	83.6	121.1	81.6	131.9	85.1	47.9	105.9	113.0	164.1	118.9	84.6	105.0	91.0	81.9	65.5
19	108.7	83.5	123.1	82.2	132.0	85.0	48.0	105.8	113.2	165.7	119.1	84.8	104.6	91.0	82.0	65.5
26	109.1	83.8	122.1	81.9	132.0	84.4	48.0	105.8	113.2	168.3	118.9	84.8	104.1	91.1	82.5	65.5

Real effective exchange rates

Index numbers, March 1973=100. The index of the real effective exchange rate is the index of the effective exchange rate adjusted for inflation differentials which are measured by wholesale prices of nonfood manufactures. Exchange rates and trade weights used in the construction of this index are the same as those used for effective exchange rate indices. Annual figures are averages of months.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
1977	100.9	99.2	93.3	101.6	102.7	96.5	92.3	99.9	104.0	105.6	109.5	97.4	99.8	105.1	91.8	101.3
1978	96.4	92.1	106.9	106.4	103.3	97.2	90.8	99.8	103.9	122.3	109.6	103.6	95.4	96.6	87.0	97.2
1979	96.5	92.2	95.7	118.7	104.1	99.2	90.6	97.3	100.4	115.6	108.4	101.6	90.3	99.4	85.9	109.3
1980	98.2	91.3	93.5	138.2	101.0	100.8	93.0	92.7	97.0	105.5	109.1	94.1	92.3	100.8	87.3	103.4
1980																
June	96.1	91.6	97.7	137.3	101.8	100.5	92.9	93.3	97.2	106.0	109.7	94.0	91.5	100.4	85.9	103.0
July	96.4	91.4	94.9	138.5	101.5	101.4	92.9	92.9	97.7	106.1	110.4	95.7	91.9	100.1	86.8	101.7
August	97.4	91.2	94.5	140.6	100.5	102.4	92.8	91.6	97.2	104.3	109.9	95.4	91.6	100.7	88.2	101.6
September	96.0	91.3	98.3	142.2	100.0	102.1	93.2	92.0	96.8	104.6	109.6	93.8	92.5	101.0	88.1	100.6
October	97.7	90.6	99.4	144.6	99.0	101.4	92.7	91.6	95.6	104.7	108.3	93.7	92.9	101.2	87.9	100.3
November	99.8	89.8	98.1	147.0	98.4	99.7	93.0	91.7	94.4	104.5	106.9	92.5	93.6	101.5	89.0	100.9
December	100.9	89.0	99.8	146.1	97.8	100.9	92.8	90.9	93.6	103.1	107.3	92.7	92.8	101.4	89.7	100.1
1981																
January	100.4	90.2	102.2	152.0	96.4	99.4	93.4	89.9	94.8	101.1	107.7	89.8	93.0	102.0	89.6	100.1
February	104.0	89.7	101.1	151.8	95.3	98.1	92.5	89.7	93.4	100.2	106.7	88.1	95.2	103.9	91.1	98.5
March	105.0	89.8	98.2	146.6	96.9	98.1	91.8	89.5	92.9	101.2	107.4	89.1	96.6	103.4	91.9	99.1
April	107.3	89.6	95.4	146.0	96.8	98.0	90.6	89.7	92.3	99.9	106.2	88.9	97.2	103.8	92.8	99.3
May	110.4	90.0	93.5	146.1	95.5	96.0	90.7	89.9	91.6	100.4	106.0	87.6	97.9	105.1	94.7	100.4

Euro-currency market size

based on foreign-currency liabilities and claims of banks in major European countries, the Bahamas, Bahrain, Cayman Islands, Panama, Canada, Japan, Hong Kong, and Singapore billions of dollars (rounded to nearest $5 billion), at end of period

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	
										Sep[r]	Dec[r]
Estimated size											
Gross	150	205	310	390	480	590	725	930	1 190	1 365	1 470
Liabilities to nonbanks	30	35	55	75	80	100	125	170	230	270	270
Liabilities to central banks	15	25	40	60	70	85	110	120	155	170	180
Liabilities to other banks[a]	105	145	215	255	330	405	490	640	805	925	1 020
Net	85	110	160	215	250	310	380	485	600	700	735
Claims on nonbanks	35	45	65	100	115	150	195	245	295	355	365
Claims on central banks and on banks outside market area[b]	35	45	75	95	115	135	155	195	245	275	295
Conversions of Euro funds into domestic currencies by banks in market area[c]	15	20	20	20	20	25	30	45	60	70	75
Euro-dollars as % of gross liabilities in all Euro-currencies	76	78	73	77	78	79	76	74	72	73	76

[a] Includes unallocated liabilities
[b] Includes unallocated claims
[c] In European market area only
[r] revised
[p] preliminary

Euro-currency deposit rates

prime banks' bid rates in London, at or near end of month

	1977	1978	1979	1980			1981				
	Dec	Dec	Dec	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Euro-dollar:											
overnight	7.12	10.62	14.00	13.25	18.50	19.25	17.50	15.75	15.00	17.17	17.62
7-day fixed	6.31	10.62	14.00	13.50	18.50	19.75	17.50	15.50	14.37	16.00	17.50
one month	6.87	11.00	14.37	14.50	18.37	19.12	17.68	16.81	14.81	17.75	17.87
three months	7.19	11.69	14.44	15.37	18.06	17.62	17.50	16.62	14.81	16.87	17.75
six months	7.50	12.31	14.44	14.87	16.87	16.75	16.75	16.75	14.81	17.00	16.94
twelve months	7.67	12.00	12.87	14.12	15.50	14.87	15.75	16.06	14.81	16.31	16.12
Euro-mark:											
one month	2.19	3.19	8.50	8.81	9.69	8.87	9.31	14.87	12.31	12.12	12.25
three months	2.50	3.31	8.56	8.94	9.56	8.87	9.37	14.25	12.31	12.44	12.68
six months	2.81	3.69	8.56	8.81	9.31	8.87	9.37	13.37	12.00	12.44	12.68
twelve months	3.06	3.81	8.12	8.56	9.37	8.93	9.31	12.75	11.43	12.00	12.68
Euro-Swiss franc:											
one month	1.31	—.06	5.19	4.12	6.12	6.00	5.50	8.37	7.50	9.50	9.62
three months	1.37	0.00	5.75	5.44	6.12	6.00	6.00	8.37	7.62	9.50	10.00
six months	1.87	0.12	5.87	5.12	6.12	5.75	6.00	8.37	7.62	9.50	10.12
twelve months	2.25	0.62	5.56	5.37	6.19	5.50	6.12	7.62	7.62	9.50	9.37
Euro-sterling:											
one month	6.50	12.00	16.75	17.00	14.50	14.75	14.25	13.75	12.50	12.37	11.87
three months	6.62	12.62	16.75	16.75	14.62	14.75	13.75	12.75	12.50	12.37	12.37
six months	7.12	13.25	16.75	16.12	14.44	14.25	13.12	12.12	12.37	12.37	12.75
twelve months	7.37	13.00	15.25	15.00	14.00	14.00	13.12	12.00	12.18	12.37	12.87
Euro-French franc:											
one month	12.25	10.50	13.87	11.00	10.50	11.12	10.37	11.75	12.00	13.12	22.50
three months	13.25	9.87	14.00	11.31	11.37	11.75	10.87	12.87	12.37	13.50	19.50
six months	14.00	9.87	14.12	12.00	12.37	12.25	11.87	13.00	12.50	13.62	18.50
twelve months	13.25	10.25	13.75	12.62	13.00	12.87	12.62	13.00	13.00	13.62	17.00
Euro-yen:											
one month	0.62	—.69	7.62	10.00	10.25	9.12	8.25	8.62	7.75	6.62	7.12
three months	1.81	0.62	8.31	9.62	10.12	9.25	8.50	8.62	7.62	7.37	7.75
six months	2.75	1.87	8.62	9.12	10.12	9.62	8.50	8.37	7.75	7.37	7.87
twelve months	3.25	2.19	7.94	9.00	9.37	9.37	8.50	8.37	7.81	7.37	8.25

Euro-currency bank credits

publicly-announced in period, in millions of dollars

	1978	*1979*	*1980*	*1981*			*Jan-Jun*	
				Apr	*May*[r]	*Jun*[p]	*1981*	*1980*
Industrial countries	**28 952**	**27 248**	**39 100**	**2 968**	**1 826**	**1 895**	**15 825**	**14 862**
Australia	212	941	2 475	80	—	—	171	603
Canada	5 705	1 845	1 743	—	100	—	340	207
Denmark	2 242	1 205	1 720	676	—	26	926	1 011
Finland	550	92	1 040	—	21	—	261	950
France	1 914	2 955	1 745	—	30	—	2 010	611
Greece	508	1 009	1 333	400	—	14	624	658
Ireland	616	687	237	250	100	88	462	—
Italy	2 485	3 708	6 268	333	660	883	3 761	2 522
Norway	1 517	935	685	—	49	31	127	297
Spain	2 426	4 184	5 457	410	375	245	2 254	2 297
Sweden	1 872	1 263	1 370	—	—	50	1 480	1 083
United Kingdom	3 898	795	1 470	10	200	—	270	898
United States	1 206	2 348	6 719	230	50	283	1 250	895
Other[a]	3 801	5 281	6 838	579	241	275	1 889	2 830
Developing countries	**37 290**	**47 964**	**33 825**	**3 506**	**2 972**	**4 209**	**21 014**	**16 430**
Non-OPEC countries	26 669	35 225	23 535	2 945	2 743	3 213	16 964	9 457
Argentina	1 461	2 965	2 506	10	200	100	932	1 192
Brazil	5 634	6 278	4 158	65	442	542	2 606	1 279
Chile	1 045	867	1 322	147	231	57	1 005	383
Korea	2 651	3 258	1 917	258	59	693	1 405	1 103
Malaysia	858	1 168	—	—	—	40	585	—
Mexico	7 250	8 243	5 971	1 620	748	775	4 852	2 177
Morocco	605	499	420	300	—	102	542	249
Peru	—	596	480	—	30	214	676	270
Philippines	2 073	2 067	1 056	50	215	135	597	349
Taiwan	254	1 063	314	—	73	53	601	64
Other[b]	4 838	8 221	5 391	495	255	502	3 163	2 390
OPEC countries	10 621	12 739	10 290	561	229	996	4 050	6 973
Algeria	2 576	1 906	40	—	—	—	—	40
Indonesia	1 118	1 061	1 435	72	78	7	305	829
Nigeria	825	1 373	1 330	—	48	240	782	443
United Arab Emirates	726	401	101	—	8	0	8	59
Venezuela	2 054	6 830	6 715	357	—	749	2 409	4 577
Other	3 322	1 168	669	132	95	—	546	1 025
Communist countries	**3 767**	**7 325**	**2 809**	**75**	**—**	**152**	**1 112**	**931**
China	—	3 395	181	—	—	—	—	—
East Germany	642	796	303	50	—	100	400	76
Hungary	700	260	550	—	—	—	550	249
Poland	374	849	800	—	—	—	—	29
Other[c]	2 051	2 025	975	25	—	52	162	577
International organizations	**160**	**275**	**429**	**—**	**20**	**—**	**70**	**409**
TOTAL	**70 169**	**82 812**	**76 163**	**6 549**	**4 818**	**6 256**	**38 021**	**32 632**

[a] Includes multi-national organizations [b] Includes regional development organizations [c] Includes COMECON institutions [p] preliminary
[r] revised

International bond yields

long-term issues, at or near end of month

	1977	*1978*	*1979*	*1980*			*1981*				
	Dec	*Dec*	*Dec*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*	*May*
U.S. companies:											
U.S. dollar	7.95	8.55	10.13	11.27	11.46	11.76	11.94	12.17	12.46	12.51	12.64
Swiss franc	5.31	5.70	6.61	7.26	7.38	7.27	7.44	7.26	7.42	7.46	7.55
European companies:											
U.S. dollar	8.42	9.21	10.93	12.04	12.23	12.42	12.53	13.06	12.94	12.99	13.81
German mark	6.80	6.84	7.55	8.66	8.82	8.79	8.85	9.58	9.16	9.18	9.71
Governments:											
U.S. dollar	8.42	9.12	10.66	11.22	11.27	11.83	11.93	12.37	12.37	12.43	12.92

New international bond issues

new issues in period, in millions of dollars

	1978	*1979*	*1980*	*1981*			*Jan-Jun*	
				Apr	*May*	*June*	*1981*	*1980*
By type:								
Euro-bonds, total	**14 125**	**18 726**	**23 970**	**1 297**	**1 707**	**3 282**	**12 222**	**12 425**
by category of borrower								
U.S. companies	1 122	2 872	4 107	290	263	730	2 380	1 990
Foreign companies	4 540	7 183	9 032	591	1 036	1 231	4 794	4 280
State enterprises	3 291	4 524	5 839	198	348	582	2 909	3 259
Governments	3 643	2 433	3 045	46	—	193	899	1 704
International organizations	1 529	1 714	1 947	172	60	546	1 240	1 192
by currency of denomination								
U.S. dollar	7 290	12 565	16 427	900	1 305	3 040	10 109	8 969
German mark	5 251	3 626	3 607	69	96	32	197	1 769
Dutch guilder	394	531	1 043	79	60	57	364	450
Canadian dollar	—	425	279	—	—	42	42	162
European unit of account	165	253	65	—	—	43	75	25
Other	1 025	1 326	2 549	249	246	68	1 435	1 050
Foreign bonds outside the United States, total	**14 359**	**17 749**	**14 521**	**1 157**	**744**	**862**	**5 969**	**6 949**
by category of borrower								
U.S. companies	245	217	307	—	—	—	221	219
Foreign companies	2 110	3 463	3 157	174	242	289	1 580	1 288
State enterprises	3 163	3 284	2 830	371	224	162	1 674	1 202
Governments	5 771	7 663	4 086	67	155	226	1 076	2 661
International organizations	3 070	3 122	4 141	545	123	185	1 418	1 579
by currency of denomination								
German mark	3 789	5 379	4 839	190	22	42	459	2 736
Swiss franc	5 698	9 777	7 617	534	403	509	3 651	3 429
Dutch guilder	385	75	259	—	24	23	179	107
Japanese yen	3 826	1 833	1 088	325	92	269	1 134	502
Other	671	685	718	108	203	19	546	175
Foreign bonds in the United States, total	**5 795**	**4 515**	**3 429**	**1 300**	**220**	**675**	**2 935**	**1 569**
by category of borrower								
Canadian entities	3 142	2 193	2 136	1 100	120	575	2 206	870
International organizations	459	1 100	550	—	—	—	—	250
Other	2 194	1 222	743	200	100	100	729	449
By country of borrower:								
Industrial countries	**24 964**	**31 886**	**32 732**	**2 791**	**2 053**	**3 598**	**16 624**	**16 760**
Australia	1 218	593	539	30	—	89	215	230
Austria	1 027	1 218	1 859	190	49	144	647	802
Canada	4 764	4 197	3 797	1 356	343	907	3 842	2 058
Denmark	1 017	752	1 125	26	47	31	204	600
Finland	952	699	392	46	106	138	354	316
France	1 286	2 106	2 820	155	167	506	1 863	1 244
Japan	3 467	5 775	5 309	204	675	564	2 818	2 192
Netherlands	250	832	1 585	17	—	43	185	819
Norway	2 751	1 954	892	35	18	69	189	577
Sweden	876	1 530	3 244	266	29	50	1 073	1 746
United Kingdom	1 365	1 181	1 733	175	29	25	359	944
United States	2 973	6 767	5 587	290	263	730	2 601	3 381
Developing countries	**4 227**	**3 093**	**2 485**	**246**	**435**	**490**	**1 814**	**1 112**
Non-OPEC countries	2 684	2 675	1 942	199	285	490	1 503	892
Brazil	843	930	349	46	—	—	46	263
Mexico	568	363	544	108	100	365	987	288
Philippines	170	175	70	—	—	—	30	—
OPEC countries	1 543	418	543	47	150	—	311	220
Algeria	721	208	—	—	—	—	—	—
Venezuela	588	55	398	—	125	—	221	120
Communist countries	**30**	**75**	**65**	—	—	—	**30**	**50**
Hungary	—	—	65	—	—	—	—	50
International organizations	**5 058**	**5 936**	**6 638**	**717**	**183**	**731**	**2 658**	**3 021**
TOTAL	**34 279**	**40 990**	**41 920**	**3 754**	**2 671**	**4 819**	**21 126**	**20 943**

Central bank discount rates

	1977	*1978*	*1979*	*1980*			*1981*	*Current*	
	end Dec	*end Dec*	*end Dec*	*end Jun*	*end Sep*	*end Dec*	*end Mar*	*Jun 26 1981*	*effective since*
United States	6.00	9.50	12.00	11.00	11.00	13.00	13.00	14.00	May 5, 81
Canada	7.50	10.75	14.00	11.83	11.20	17.36	16.69	19.08	Jun 25,81
Japan	4.25	3.50	6.25	9.00	8.25	7.25	6.25	6.25	Mar 18, 81
United Kingdom	7.00	12.50	17.00	17.00	16.00	14.00	12.00	12.00	Mar 11, 81
Belgium	9.00	6.00	10.50	13.00	12.00	12.00	16.00	13.00	May 29, 81
France	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	3.00	3.00	6.00	7.50	7.50	7.50	7.50	7.50	May 2, 80
Italy	11.50	10.50	15.00	15.00	16.50	16.50	19.00	19.00	Mar 23, 81
Netherlands	4.50	6.50	9.50	9.50	8.50	8.00	9.00	9.00	Mar 3, 81
Austria	5.50	4.50	3.75	6.75	6.75	6.75	6.75	6.75	Mar 21, 80
Denmark	9.00	8.00	11.00	13.00	12.00	11.00	11.00	11.00	Oct 27, 80
Finland	8.25	7.25	8.50	9.25	9.25	9.25	9.25	9.25	Feb 1, 80
Ireland	6.75	11.85	16.40	16.85	13.50	12.75	12.75	14.40	May 15, 81
Norway	6.00	7.00	9.00	9.00	9.00	9.00	9.00	9.00	Nov 30, 79
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	Jul 26, 77
Sweden	8.00	6.50	9.00	10.00	10.00	10.00	12.00	12.00	Jan 20, 81
Switzerland	1.50	1.00	2.00	3.00	3.00	3.00	4.00	5.00	May 11, 81
Argentina	165.27	108.19	89.90	85.86	69.64	87.01	109.34	101.30	May 8, 81
Korea	14.00	14.50	14.50	19.50	17.50	15.50	15.50	15.50	Nov 11, 80
New Zealand	10.00	10.50	13.00	13.00	14.00	14.00	14.00	14.00	Jul, 80
Philippines	6.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	May 19, 78
Singapore	3.50	4.50	6.75	8.50	8.75	10.50	11.00	10.00	Apr 20, 81
South Africa	9.00	8.50	7.00	7.00	7.00	7.00	8.00	10.50	Jun 24, 81
Venezuela	7.00	7.50	11.00	10.00	10.00	13.00	13.00	12.00	Apr 25, 81

Day-to-day money rates

monthly averages

	1977	*1978*	*1979*	*1980*			*1981*				
	Dec	*Dec*	*Dec*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*	*May*
United States	6.56	10.03	13.78	12.81	15.85	18.90	19.08	15.93	14.70	15.50	18.52
Canada	6.84	9.44	13.83	10.70	11.05	15.61	16.93	16.58	16.90	16.79	17.17
Japan	5.01	4.57	8.02	11.00	9.61	9.49	8.90	8.54	8.24	7.19	7.08
Australia	9.96	8.40	7.84	8.96	9.84	9.51	9.69	10.35	11.11	11.83	12.07
United Kingdom	4.81	10.00	14.87	15.00	12.25	13.00	12.19	12.19	11.06	10.15	9.95
Belgium	7.48	6.73	10.65	9.60	10.16	9.68	10.32	9.18	10.13	16.51	13.00
France	9.30	6.67	12.17	11.22	10.74	10.87	10.73	10.91	11.72	12.23	16.03
Germany	3.24	3.61	9.15	8.98	8.82	9.13	9.13	10.57	11.25	11.27	11.79
Italy	11.37	11.00	16.00	17.87	17.62	17.50	17.37	17.37	19.62	19.62	19.75
Netherlands	5.27	10.00	15.67	9.30	9.00	8.37	8.95	9.12	9.75	9.50	10.88
Austria	9.25	5.37	8.50	11.00	11.50	11.50	9.50	9.00	11.00	12.00	9.00
Finland	22.99	9.29	13.53	12.50	12.50	12.50	12.50	12.50	11.72	10.57	11.00
Ireland	8.00	12.12	16.88	13.25	13.38	13.31	13.44	13.38	13.12	15.38	14.12
Spain	7.22	16.75	9.61	14.38	15.24	16.74	15.89	12.50	11.98	13.89	16.80
Sweden	8.91	6.26	11.99	13.00	11.80	11.41	12.75	16.97	15.40	14.20	14.96
Switzerland	0.85	0.00	1.25	0.87	3.37	5.75	3.75	3.50	4.50	5.00	3.62
Argentina	n.a.	n.a.	78.22	54.58	58.04	70.84	74.81	92.07	133.08	96.66	108.76
Brazil	28.44	35.64	32.28	38.28	40.56	49.68	51.60	54.48	56.64	49.32	65.16
Hong Kong	4.87	9.67	14.19	10.87	13.87	14.05	14.18	18.00	16.85	16.43	16.67
Korea	14.40	15.00	15.00	17.22	14.82	14.82	14.82	14.82	14.82	14.82	14.82
Philippines	14.44	13.22	16.25	9.26	13.10	15.70	13.66	14.43	17.34	15.59	16.61
Singapore	3.59	4.98	10.17	14.53	11.06	10.23	11.77	12.73	9.73	6.76	n.a.
South Africa	7.65	7.11	3.81	4.47	4.99	5.60	6.22	7.06	7.26	7.49	8.51
Euro-dollars	6.94	10.80	14.41	13.18	16.15	19.22	19.05	16.14	14.57	16.36	18.19

Treasury bill rates

bond-equivalent yields, at or near end of month

	1977	1978	1979	1980			1981				
	Dec	Dec	Dec	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
United States	6.33	9.42	12.39	13.07	14.84	14.87	15.83	14.80	13.55	15.51	16.00
Canada	7.17	10.46	13.66	11.91	13.70	17.01	16.86	16.83	16.44	17.35	18.43
Japan	4.15	3.39	5.68	6.44	5.93	5.93	5.93	5.93	5.93	5.93	5.93
Australia	8.35	8.35	9.31	10.95	11.47	12.17	12.42	12.68	12.72	13.78	13.22
United Kingdom	6.42	12.01	16.45	14.44	13.38	13.45	13.02	11.93	11.87	11.57	11.78
Belgium	9.25	9.25	14.40	12.10	12.75	12.75	12.10	13.25	15.00	17.00	16.75
Ireland	6.74	11.83	16.37	12.72	12.78	12.84	12.83	12.84	12.70	13.85	14.65
Italy	12.81	12.81	15.62	16.87	16.87	16.87	16.87	16.87	19.18	19.84	21.18
Netherlands	6.00	9.50	12.75	8.85	8.75	8.00	8.75	8.75	9.25	9.75	11.75
Spain	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13.25	17.00
Sweden	9.21	5.84	9.74	12.90	12.90	12.87	16.85	16.85	15.73	15.73	15.77
Argentina	109.06	82.55	71.04	58.31	60.73	66.19	69.10	90.06	107.97	86.79	104.34
Brazil	38.08	41.21	27.84	50.18	66.34	76.84	78.24	73.58	70.46	71.33	71.88
Korea	16.88	17.01	19.53	19.50	16.35	16.35	18.98	18.98	18.98	18.98	18.16
Mexico	n.a.	12.75	17.89	24.73	25.81	27.73	28.87	28.76	28.55	28.27	n.a.
New Zealand	7.50	10.50	11.25	11.25	11.25	11.25	11.50	11.25	11.25	11.25	11.25
Philippines	10.04	12.08	12.63	12.70	12.75	12.74	12.65	12.65	12.69	12.76	12.76
Singapore	3.17	4.01	6.18	6.98	6.86	6.77	6.86	6.84	6.60	6.58	n.a.
South Africa	8.17	7.61	4.30	5.13	5.71	6.31	6.89	7.59	7.82	7.89	9.08

Representative money-market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money-market instruments, other than Treasury bills, at or near end of month

	1977	1978	1979	1980			1981				
	Dec	Dec	Dec	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
United States	6.84	10.57	13.70	14.24	17.15	17.62	16.67	15.48	14.25	16.80	16.94
Canada	7.25	10.62	14.15	12.50	14.10	17.50	16.95	16.85	17.05	17.55	19.00
Japan	5.89	4.64	8.01	9.57	9.80	9.80	8.32	8.37	7.34	6.76	7.52
Australia	9.75	9.10	10.30	11.70	11.75	13.00	13.25	14.00	15.10	15.75	15.50
United Kingdom	6.50	12.50	17.00	16.62	14.50	14.75	13.19	12.50	12.50	12.37	12.44
Belgium	9.50	9.25	14.45	12.45	13.00	13.10	12.35	13.00	14.00	17.00	16.85
France	9.19	6.44	12.62	11.31	11.44	11.56	11.25	13.50	12.75	13.37	18.25
Germany	3.60	3.70	8.70	9.20	9.45	10.20	9.45	14.50	13.30	12.90	13.30
Ireland	6.75	13.00	18.12	13.37	13.75	13.62	13.87	14.78	14.00	15.37	15.94
Italy	11.75	11.37	17.12	17.75	17.37	17.37	17.37	17.50	19.75	19.75	20.00
Netherlands	6.25	10.50	13.00	9.25	10.00	9.37	9.50	11.25	10.37	11.25	12.25
Spain	12.06	22.80	13.20	15.30	16.00	17.40	17.40	15.00	13.20	13.79	16.28
Switzerland	2.02	0.50	6.12	5.62	6.12	7.50	6.00	8.50	9.37	10.00	10.50
Hong Kong	5.73	11.82	14.37	12.56	15.87	17.69	15.53	16.86	16.27	16.45	17.55
Korea	16.88	17.01	19.53	19.27	16.35	16.35	16.35	16.35	16.35	15.60	15.70
New Zealand	11.87	12.00	16.00	14.25	14.10	14.25	14.35	14.80	15.60	14.70	14.50
Philippines	11.96	11.48	10.41	11.96	13.15	15.01	15.98	16.86	16.63	16.67	17.50
Singapore	4.81	7.38	10.12	13.62	14.12	14.12	14.25	13.69	11.69	10.06	n.a.
South Africa	9.00	7.85	4.72	5.05	6.07	7.12	8.42	9.73	9.89	9.84	12.37

Commercial bank deposit rates

at or near end of month

	1977	1978	1979	1980			1981				
	Dec	Dec	Dec	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
United States	6.80	10.90	13.55	14.25	17.07	16.25	16.00	14.75	13.50	16.75	16.75
Canada	7.25	10.45	14.05	12.40	13.95	17.00	16.90	17.15	16.85	17.50	18.50
Japan	3.25	2.50	8.37	9.50	9.90	9.00	8.72	8.25	7.25	7.35	n.a.
Australia	9.50	8.50	10.25	10.95	11.21	12.71	12.85	14.14	14.95	16.17	15.43
United Kingdom	6.37	12.25	16.81	16.75	14.44	14.87	13.44	12.37	12.44	12.41	12.50
Belgium	9.50	9.87	14.50	12.13	13.00	12.63	12.13	13.50	15.50	16.75	16.50
France	9.00	6.50	12.50	11.00	11.50	11.25	11.25	12.00	13.00	15.00	16.00
Germany	3.40	3.50	7.75	8.40	8.75	8.00	8.70	13.50	12.50	11.75	12.25
Italy	17.00	12.50	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25
Netherlands	7.00	11.62	13.50	9.75	10.25	9.50	9.62	11.50	10.50	11.50	12.25
Austria	9.00	6.75	8.50	11.50	11.50	11.25	10.00	9.75	11.50	11.75	12.50
Denmark	8.00	7.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Finland	4.25	3.25	4.25	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Ireland	6.87	12.75	17.87	13.25	13.75	13.62	13.50	14.62	13.50	15.12	15.75
Norway	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Spain	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	12.00	13.00
Sweden	7.75	6.25	8.75	9.75	9.75	9.75	11.75	11.25	11.25	11.25	11.25
Switzerland	1.12	0.12	4.75	5.62	6.12	7.50	6.12	8.50	7.25	8.50	9.00
Argentina	n.a.	86.63	72.64	59.00	62.00	72.00	76.50	97.00	130.00	87.00	123.00
Brazil	39.60	46.80	45.00	54.48	61.20	69.48	72.00	72.84	73.44	75.36	76.20
Hong Kong	1.75	4.50	9.25	9.00	13.00	13.00	13.00	13.25	13.00	13.00	13.00
Korea	13.20	15.00	15.00	17.22	14.82	14.82	14.82	14.82	14.82	14.82	14.82
Mexico	11.00	12.00	16.75	21.74	23.25	26.15	27.13	27.00	26.65	26.50	n.a.
New Zealand	11.00	12.00	15.90	13.50	13.50	13.50	13.75	14.00	14.50	14.30	14.60
Philippines	8.50	8.50	10.50	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Singapore	5.31	7.31	10.31	13.00	13.50	13.19	12.62	12.19	10.75	9.12	n.a.
South Africa	8.70	7.30	4.82	5.10	6.62	7.87	9.25	10.75	10.27	10.87	13.37
Venezuela	7.00	7.25	15.00	12.00	12.00	16.00	16.00	16.00	14.00	14.00	14.00

Commercial bank lending rates to prime borrowers

at or near end of month

	1977	1978	1979	1980			1981				
	Dec	Dec	Dec	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
United States	7.75	11.75	15.25	14.50	17.75	21.50	20.00	19.00	17.00	18.00	20.50
Canada	8.25	11.50	15.00	12.75	14.50	18.25	18.25	18.25	17.75	18.25	19.50
Japan	5.47	4.50	6.51	8.82	8.58	8.16	7.94	7.86	7.74	7.50	7.35
Australia	11.50	11.00	10.75	12.50	12.50	13.50	13.50	13.50	14.25	15.00	15.00
United Kingdom	8.00	13.50	18.00	17.50	15.00	15.00	15.00	15.00	13.00	13.00	13.00
Belgium	10.00	10.00	15.25	15.75	15.75	15.75	15.25	15.25	16.50	19.25	18.75
France	11.35	10.95	13.65	13.40	13.40	13.40	13.40	14.15	14.90	14.90	18.15
Germany	6.00	5.50	9.75	11.50	11.50	11.50	11.50	12.00	13.75	13.75	14.25
Italy	16.00	15.00	19.50	19.50	21.00	20.50	20.50	21.00	22.50	22.50	21.50
Netherlands	7.00	12.00	15.00	10.25	10.75	10.75	10.50	10.75	11.25	11.25	13.25
Austria	9.75	8.75	8.50	12.00	12.25	12.50	12.50	12.50	12.50	12.50	13.00
Denmark	12.50	10.00	13.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75
Finland	8.85	7.87	9.06	9.83	9.82	9.83	9.84	9.84	9.85	n.a.	n.a.
Ireland	8.25	13.75	16.00	14.50	14.50	14.50	14.50	14.50	14.50	14.50	15.50
Norway	8.33	11.00	11.00	12.50	12.50	12.50	12.50	12.50	12.50	12.50	13.75
Spain	9.00	9.00	9.00	16.59	17.01	18.50	18.72	16.92	15.46	15.11	17.25
Sweden	10.25	8.50	10.75	11.75	11.75	11.75	13.75	13.75	13.75	13.75	13.75
Switzerland	5.75	5.00	5.00	5.75	5.75	5.75	5.75	6.00	6.50	7.00	7.00
Argentina	152.08	86.75	80.00	60.00	66.00	77.00	81.00	114.00	146.00	90.00	141.00
Brazil	52.05	61.70	57.00	57.00	88.00	88.00	133.75	133.75	133.75	133.75	127.38
Hong Kong	4.75	8.75	14.50	13.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00
Korea	15.00	18.50	18.50	21.50	19.50	19.50	19.50	19.50	19.50	19.50	19.50
Mexico	17.00	17.50	19.00	22.42	22.77	24.25	25.46	25.98	26.59	26.91	27.22
New Zealand	8.50	9.75	11.75	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Philippines	14.00	14.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
Singapore	7.02	7.65	9.50	12.60	13.55	13.60	14.30	14.30	13.68	12.72	n.a.
South Africa	12.50	11.50	9.50	9.50	9.50	9.50	10.00	11.00	11.50	11.50	13.00
Venezuela	9.50	10.25	13.00	12.00	12.00	15.00	15.00	15.00	13.00	13.00	13.00

Domestic government bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980			1981				
	Dec	*Dec*	*Dec*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*	*May*
United States	7.97	9.00	10.20	12.33	12.25	11.46	12.76	13.16	13.21	14.13	13.52
Canada	8.77	9.68	11.32	13.22	13.01	12.69	12.96	13.38	13.48	15.07	14.96
Japan	6.40	6.40	8.63	8.84	9.26	9.04	8.84	8.89	8.67	8.84	9.23
Australia	9.50	8.90	10.45	12.40	12.60	13.00	13.10	13.10	13.10	13.10	13.10
United Kingdom	10.53	12.75	13.83	12.52	12.65	13.05	13.25	13.36	12.86	13.18	13.50
Belgium	8.76	8.80	11.13	12.46	12.61	13.04	13.19	13.44	13.57	13.52	13.85
France	11.07	9.94	12.59	14.27	14.24	14.31	14.58	15.05	14.98	14.95	17.25
Germany	5.52	6.65	7.91	8.55	8.59	9.19	9.07	10.38	9.97	10.12	10.68
Italy	10.82	10.89	11.28	12.53	12.42	12.12	12.44	12.88	14.46	14.53	14.27
Netherlands	8.11	8.48	9.29	10.20	10.46	10.48	10.43	10.96	11.38	11.29	11.89
Austria	9.00	7.91	8.20	9.90	10.11	9.62	9.80	10.06	10.33	10.18	n.a.
Denmark	16.83	17.27	18.28	19.24	19.40	19.62	18.56	18.90	19.12	19.23	19.48
Finland	10.25	9.19	9.58	10.48	10.43	10.42	10.92	10.92	10.96	10.97	10.96
Ireland	11.30	13.44	16.64	14.77	14.91	15.63	16.22	16.01	16.12	16.57	16.99
Norway	8.37	8.19	10.04	10.40	10.44	10.44	11.70	11.50	11.57	11.65	11.65
Spain	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13.00	12.75
Sweden	9.84	10.09	11.22	12.68	12.71	12.61	n.a.	n.a.	n.a.	n.a.	n.a.
Switzerland	3.75	3.03	4.20	4.69	4.67	4.63	4.79	5.20	5.40	5.79	5.85
Argentina	181.65	112.18	47.94	38.21	101.38	36.84	34.97	42.99	66.43	65.64	144.24
New Zealand	10.00	10.02	12.98	12.96	12.96	12.99	12.81	12.97	12.88	12.85	n.a.
Philippines	13.40	13.40	13.20	13.40	13.40	13.40	13.40	13.40	13.40	13.42	13.41
South Africa	10.75	9.85	9.44	11.10	11.75	11.80	12.67	12.77	12.77	12.80	13.03
Venezuela	7.24	7.24	7.29	7.40	7.43	7.39	7.44	7.40	7.30	10.00	10.00

Domestic corporate bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980			1981				
	Dec	*Dec*	*Dec*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*	*May*
United States	8.30	9.25	10.75	13.38	13.38	13.00	13.63	14.13	14.00	15.00	14.25
Canada	9.71	10.34	12.07	13.95	13.72	13.62	13.84	14.34	14.41	16.03	15.94
Japan	6.68	6.94	8.34	8.48	8.60	8.60	8.49	8.25	8.15	7.95	n.a.
Australia	11.00	10.25	11.65	13.75	14.00	14.25	14.25	14.10	14.25	14.50	15.00
United Kingdom	11.88	13.53	14.96	13.61	13.63	14.21	14.20	14.14	14.35	14.44	14.94
France	12.09	10.27	12.92	14.69	14.83	15.23	14.62	15.13	15.39	15.39	15.35
Germany	5.92	6.80	8.20	8.80	9.30	9.50	9.50	10.00	10.90	10.90	11.40
Italy	10.71	10.12	10.22	12.64	12.65	12.99	12.80	13.05	16.82	17.01	19.84
Netherlands	7.90	8.62	9.95	10.48	10.33	10.71	10.46	10.77	11.21	11.07	11.76
Norway	8.59	8.37	10.53	10.55	11.24	11.24	11.75	12.07	12.36	12.76	12.76
Spain	11.58	13.49	14.20	14.90	15.10	14.82	14.28	14.36	14.55	14.73	n.a.
Sweden	9.83	10.03	10.21	11.99	12.10	11.95	13.37	13.46	13.56	13.63	13.66
Switzerland	4.96	4.85	5.53	5.71	5.78	5.63	5.78	5.93	6.08	6.08	6.44
Korea	19.60	24.00	32.50	26.00	23.50	26.30	26.30	24.70	23.00	22.30	22.30
Mexico	17.56	20.37	21.99	26.12	27.55	28.03	28.33	30.90	30.20	30.97	28.92
Venezuela	10.39	12.43	14.55	13.55	14.78	16.15	16.65	16.20	16.00	16.25	16.30

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World Financial Markets

Morgan Guaranty Trust Company of New York

July 1981

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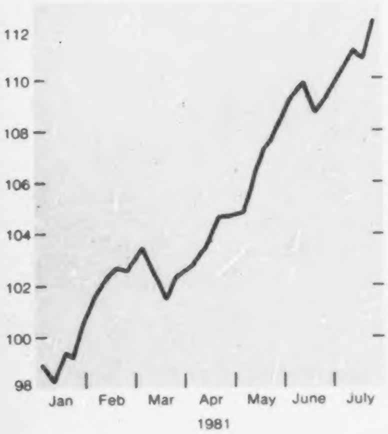
Nominal effective dollar exchange rate
weekly averages
index, March 1973=100



Foreign exchange market developments

While foreign exchange rates have displayed considerable volatility in recent weeks, the dollar's underlying firmness against virtually all principal currencies has persisted. On a trade-weighted basis, the dollar has appreciated by about 3½% over the past month, bringing the gain since the beginning of this year to more than 13% (see Table 1).

Several foreign officials have made statements or taken actions aimed at limiting their currencies' weakness. The Bank of England earlier this month signaled its concern about sterling's decline by giving an upward nudge to domestic money market rates, an action that also appears to have been in line with its move toward greater interest rate flexibility. The Bundesbank announced that German interest rates probably would remain high for some time, and that it intended to hold money growth during the remainder of this year in the lower half of the annual target range. Japanese officials indicated their belief that the yen had become substantially undervalued. While ruling out use of its special Lombard facility to boost domestic interest rates, the Bank of Japan has been intervening heavily. Apart from Japan, dollar intervention by foreign central banks has been modest, basically smoothing market trends.

Interest rates and inflation

Dollar strength partly reflects the effects of still-high U.S. interest rates and favorable rate differentials, although other very important factors contribute to it as well. The Federal Reserve gives every indication of maintaining a tight rein on bank reserves and of keeping monetary aggregate growth under firm control. This was confirmed by Federal Reserve Board Chairman Volcker in recent testimony before congressional committees. In the past few months growth of the money supply on both the narrow and broad measures has slowed, although in relation to the Federal Reserve's longer-term target ranges the performance of the various aggregates still is mixed. The Federal funds rate has continued to trade around the 18%-19% level, and rates on private money market instruments of one- to three-month maturities are between 18% and 18½%, up by more than one percentage point in the past month.

Nevertheless, most observers still look for some decline in short-term

Table 1

Exchange rate changes from January 2 and June 15, 1981 to July 24, 1981

percent vis-à-vis the dollar and on a trade-weighted average basis

	vis-à-vis dollar		*trade-weighted average basis*	
	from: Jan 2	*Jun 15*	*from: Jan 2*	*Jun 15*
Dollar	—	—	13.3	3.6
Canadian dollar	-2.0	-1.4	1.1	-0.6
Japanese yen	-13.8	-6.2	-6.7	-4.8
Belgian franc	-20.5	-3.4	-1.6	0.5
Dutch guilder	-21.2	-3.7	-3.0	0.2
French franc	-21.2	-3.4	-3.7	0.4
German mark	-19.5	-4.1	-1.6	-0.8
Italian lira	-22.8	-3.3	-6.0	0.4
Swiss franc	-15.2	-2.9	3.4	0.8
British pound	-22.2	-7.3	-8.4	-4.6

U.S. interest rates later this summer and into the autumn. This decline in rates would not represent a change in basic monetary policy, but rather a weakening in the growth of overall spending and diminished credit demand, reflecting both sluggish real economic activity and slower inflation. Furthermore, a decline in rates may not lead to a major reversal of this year's dollar appreciation, in contrast to the spring of 1980 when a fall in U.S. interest rates was accompanied by a more than 8% drop in the dollar's effective exchange rate.

This time the decline in nominal interest rates is likely to be far more gradual than the steep drop in rates last year, when Federal funds plunged from 18% in April to 9% in July. Economic activity has turned distinctly sluggish this summer, but a pronounced recession is not in prospect. The Federal Reserve also will not risk another surge in money supply growth.

The decline in real interest rates is likely to be even smaller by comparison with last year, when inflation expectations were conditioned by a rapid acceleration of consumer prices. By contrast to the 13% average rate of consumer price inflation during 1979 and 1980, inflation has receded in recent months. Consumer prices increased by a 7½% annual rate between the first and second quarters of this year and the rate of advance is widely expected to remain in the 7%-8% range over the next year. This recent slowdown is partly attributable to a number of very favorable influences that cannot be expected to continue indefinitely. Food prices have been surprisingly stable. Moreover, once decontrol of oil prices was out of the way, domestic energy prices began to ease with the softening of world oil prices. The dollar's large rise also is dampening U.S. inflation, constraining both import prices and commodity prices in general.

- Longer-run inflation expectations do not seem to have diminished to the same extent as the slowdown in consumer prices. This is suggested by the persistence of high long-term bond yields. Most long-term forecasts of inflation also have not been revised down substantially. This partly reflects doubts about the permanence of the recent favorable developments affecting some of the components of the consumer price index. However, the so-called underlying rate of inflation may be edging down. Wage increases have leveled off. One measure — average hourly earnings in industry (adjusted for overtime and interindustry shifts) — even shows a distinct slowing from 9.7% during 1980 to a 7.1% rate in the second quarter of 1981. Responding to slack in labor markets, wages also will be affected by the slowing in consumer price increases, both directly via lower cost-of-living adjustments and indirectly through changing expectations. In addition, productivity gains could improve during the next few years, especially as economic growth revives and business capital investment increases.

Thus, even if U.S. short-term interest rates were to decline by several percentage points in the coming months, real rates could remain very high. This will tend to keep the dollar relatively strong, as will confidence inspired by the basic changes that have occurred in U.S. economic policy. The Federal Reserve is firmly committed to gradually slowing money supply growth and officials of the Reagan Administration are fully behind the Fed stance.

Government deficits

While foreign exchange market

Table 2

General government financial balances

surplus (+) or deficit (—) as percentage of GNP

	1979	*1980*	*Proj. 1981*
United States	+0.5	—1.2	—0.7
Canada	—1.7	—2.2	—1.4
Japan	—4.7	—3.9	—3.0
France	—0.6	+0.4	—1.0
Germany	—2.9	—3.5	—4.5
Italy	—9.4	—7.8	—10.8
United Kingdom	—3.2	—3.5	—2.3

participants are impressed by the Federal Reserve's commitment to fight inflation, they are not quite as sanguine about fiscal policy. Nonetheless, their concerns do not appear to be as keenly felt as in the domestic financial markets. This may be explained partly by the perception that the U.S. fiscal outlook is better than seemed possible at the beginning of this year and partly by an awareness that many other countries face more serious fiscal policy problems.

It is widely acknowledged that U.S. fiscal policy is moving in new and generally more favorable directions. Congressional approval of major cuts in social programs marks a striking reversal of longstanding trends. The trimming and delayed enactment of personal income tax cuts will help contain budget deficits in the current fiscal year as well as in the next. There are still a number of concerns in the fiscal area, including the possible inflationary implications of increased defense outlays, the tendency for spending (such as that for interest payments) to deviate from original expectations, and the widening scale of tax relief being appended by Congress to the Administration's basic proposal for personal and business tax cuts. Federal budget deficits could reach $56 billion (2% of GNP) in the current fiscal year and close to $60 billion (1.9%) in fiscal 1982.

Many other countries face government deficits that are substantially larger in relation to GNP than that of the United States. Making comparisons, of course, is difficult because of differing governmental structures and reporting practices. One measure that puts them on a reasonably comparable basis is the so-called general government financial balance. This measure combines the budget balance of the federal or central government with those of lower levels of government, all expressed on a national accounts basis (see Table 2). According to this measure, the U.S. deficit could drop from 1.2% of GNP in calendar 1980 to an estimated 0.7% of GNP this year, rising to 1.2% again in calendar 1982.

By contrast, Germany's general government deficit is expected to reach 4.5% of GNP in 1981, up from 3.5% in 1980. Attempts to contain its expansion in 1982 are causing major political tension within the government coalition. Britain's budgetary position is clouded by the civil service strikes, which have slowed revenue collection. However, there are numerous signs of slippage in nationalized industry finance. Growth and inflation assumptions underlying the government's medium-term financial strategy look increasingly unrealistic. Sterling's depreciation threatens to bring a halt to the deceleration of inflation and pay awards. Employment worries also may make it exceedingly difficult to curtail spending and to reduce the public-sector borrowing requirement.While lower than last year, Britain's general government deficit still may exceed 2.3% of GNP in 1981. Italy's general government financing requirement seems on the verge of running out of control again, and could reach 10.8% of GNP this year. The new French government, in its efforts to stimulate growth and employment, already has taken measures that, combined with the previous government's actions, could lead to a sharp deterioration of the budget this year. In terms of the general government financial balance, France is expected to record a deficit equal to at least 1% of GNP this year versus a surplus of 0.4% in 1980. Although Japanese authorities are making a determined effort to improve their budgetary position, the general government deficit still will be close to 3% of GNP this year.

U.S. payments strength

The dollar also continues to receive support from a relatively favorable U.S. current account position. The current account registered a surplus of more than $12 billion at a seasonally adjusted annual rate in the first quarter of this year, close to last year's second-half outcome. A widening of the trade deficit in April-May suggests that the current account balance deteriorated in the second quarter. However, it probably remains on the plus side.

The longevity of this relatively favorable position is put in question by the erosion of U.S. competitiveness implied by the dollar's appreciation. The dollar has gained about 15% on a real effective basis since last December, and currently stands more than 17% above its average real value in the second half of the 1970s. A change of this magnitude is bound to have a considerable adverse impact on U.S. manufactures trade over the next year or two. The 9% real depreciation of the dollar between December 1976 and October 1978 was a major source of the $23 billion improvement in U.S. manufactures trade between the second halves of 1978 and 1980, although relative cyclical conditions were also a contributing factor. The greater magnitude of the dollar's recent real appreciation could bring an even larger opposite swing in the period ahead.

Several factors, however, mitigate the extent of potential current account weakening during the next 12-to-18 months. First, although the growth of many U.S. export markets is likely to be subdued, the U.S. economy also is expected to be sluggish into next year. A resumption of moderate growth in the United States during 1982 probably will be accompanied by a gradual pickup in economic activity in other industrial nations as well as continued growth in developing-country markets.

Second, relative stability of world oil prices could continue, barring a major supply disruption. Declines in domestic consumption and some reduction in commercial inventories could thus keep U.S. oil imports below the estimated $80 billion annual rate recorded in the first half of 1981.

Third, the volume of U.S. agricultural exports is rising, even without sizable sales to the Soviet Union. While prices of grains and soybeans have softened, the value of agricultural export shipments may continue to edge higher.

Fourth, growing net investment income ensures that the secular uptrend in the U.S. surplus on service transactions will continue. Until last year strong gains in direct investment income boosted net services receipts. Now, the slowing of U.S. petroleum companies' overseas earnings, weak economic activity abroad, and the reduced dollar equivalent of U.S. manufacturers' foreign currency earnings are trimming U.S. direct investment income.

While direct investment income receipts have temporarily slackened — they should resume growing next year as Europe pulls out of recession — net interest receipts have begun to surge on the strength of high interest rates and large increases in net interest earning assets. Such income (including other portfolio income receipts) could reach $10 billion this year, about double last year's level, bringing total net investment income to approximately $36 billion, versus $33 billion in 1980. Further gains are in prospect for 1982.

Altogether, the U.S. current account could remain in small surplus during the second half of this year

Table 3

Current account balances

billions of dollars, seasonally adjusted annual rates

	1980	1981	
	year	1st half	2nd half
United States	3.7	7.0	3.0
Canada	—1.6	—5.0	—4.6
Japan	—10.8	1.0	1.0
France	—7.9	—6.5	—5.5
Germany	—16.0	—13.0	—11.0
Italy	—9.9	—8.0	—8.0
United Kingdom	6.4	13.0	3.0

and be reasonably close to equilibrium in the first part of 1982, thereafter sliding into deficit as the recent erosion of competitiveness takes its toll on U.S. manufactures trade. Meanwhile, capital inflows for direct and portfolio investment in the United States could be vigorous.

The dollar's appreciation has been part of a general realignment of exchange rates that should lead to a significant narrowing of current account imbalances among industrial countries. First-half 1981 current account estimates in Table 3 show some evidence of this. With the principal exception of Japan, which has been benefiting from the large real depreciation of the yen between late 1978 and early 1980, the reductions in payments imbalances have been relatively modest to date and can be explained in large part by cyclical developments. Favorable movements in net trade volumes have been largely offset by adverse shifts in terms of trade. During the second half of this year, though, and especially in 1982, the current accounts of many continental European countries are likely to register more substantial improvement. Even so, most of them will remain in deficit. Thus, while the U.S. position may no longer be viewed in such a favorable light, moderate deterioration should not be particularly worrisome to exchange markets, and the dollar could retain much of this year's strength.

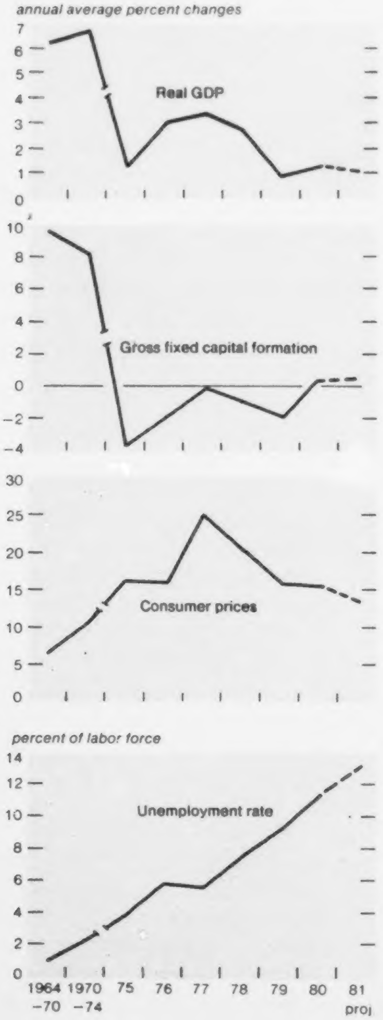
Spain: new policy directions

After a long period of increasingly unsatisfactory economic trends and postponed adjustment, Spain now is making a concerted attack on its problems. The change in political leadership early this year has been followed by economic measures that may have a positive impact on lagging investment and growth. Rapid growth in the 1960s and early 1970s, typically 6%-7%, came to a sudden halt in 1973-74 (see chart). From then until 1980, growth in real GDP averaged only about 2% per annum, compared with nearly 3% for industrial countries generally.

Reasons for the prolonged slump

The first oil shock hit Spain particularly hard because the country depends on external sources of energy for about two-thirds of total consumption, a higher proportion than for most other European countries. There was a large, unfavorable terms of trade impact (more than 3% of GDP in 1974) on both domestic demand and the balance of payments. Also, Spanish exports of goods and services were dampened by the slowdown in foreign markets. Declining employment opportunities reduced remittances from Spanish workers abroad. Loss of momentum in tourism receipts and reduced worker mobility severely curbed construction activity in Spain. At the same time newly industrializing countries were penetrating many of Spain's foreign markets, because of both rapid technological adaptation and strong cost advantages. Spain's strategy in the 1950s and 1960s of relying on rapid expansion in steel, shipbuilding, textiles, and chemicals for growth in GDP was no longer viable; but recognition of this and adjustment were slow.

The transition from authoritarianism to fledgling democracy, following the death of Generalissimo Franco in 1974, absorbed political energies and sidetracked economic policy formulation. The easing of central political control gave rein to the development of regional autonomy movements, spurring demands for aid to structurally weak industries in the Basque area and Catalonia.



Spain: growth, investment, inflation, and unemployment

Trade unions acquired more influence and continued on a successful campaign to boost low (by European standards) real wage levels, undermining the competitiveness and profitability of Spanish industry. In the uncertain political and economic climate, and with profit margins under increasing pressure from soaring wage and social security costs, private indigenous Spanish investment entered a period of prolonged decline. Spain was able to postpone adjustment to cumulative economic dislocations through the 1973-1979 period in part because slow expansion of domestic demand suppressed an underlying external payments imbalance.

However, further worsening of economic conditions in 1980 brought matters to a head. Unemployment continued to rise sharply, surpassing 12% of the labor force by year-end, as growth lagged. Inflation remained high at around 15%. Additionally, the current account balance lurched from a $1.1 billion surplus in 1979 to a $5 billion deficit last year. The second surge in global oil prices caught Spain nearly as unprepared as had the first one. The oil import bill jumped from a net $6¾ billion in 1979 to $12 billion in 1980. Trade balance deterioration was reinforced by the effect of weakened Spanish price competitiveness in manufactures, and terrorist incidents further deterred tourism. The peseta began to fall sharply. The economic predicament contributed to political pressures that led this year to a change in leadership of the governing centrist coalition.

The policy response

Since taking office at the beginning of March, Prime Minister Calvo Sotelo has moved rapidly to implement an economic recovery program. The program has several interrelated objectives: to stimulate investment so as to promote economic growth and lessen unemployment; to reduce inflation by restraining nominal wages; and to strengthen the balance of payments through reduction of dependence on foreign sources of energy and improved industrial competitiveness.

To achieve these ends, a number of measures have been introduced or proposed. The recently concluded tripartite (employer, labor, government) agreement on wages and employment is of signal importance, since it should restrain inflation and allow the new administration to concentrate on structural measures. Under the pact, basic wages are to rise by between 8% and 11% in 1982 with limited provisions for cost-of-living adjustment, versus the 11%-14% agreed for 1981. The rate of rise in actual earnings should decline by two to three percentage points between 1981 and 1982, to the vicinity of 12%-13%, implying a reduction in real wages of perhaps 1%-2%.

As a quid pro quo, the government is committed to raise unemployment benefits, take over a portion of employers' social security contributions, and stimulate the creation of 350,000 new jobs by the end of 1982. Many of these jobs are to be provided through increased government spending on capital projects, particularly in the areas of housing, energy, and rural infrastructure. Total government spending is to rise by a nominal 20% between 1981 and 1982 — or by perhaps 6% in real terms — and investment expenditures alone by more than 30%. Meanwhile, subsidies to obsolescent industries are being reduced, to encourage a shift of resources into sectors with growth potential.

The large current account deficit notwithstanding, this expansionary fiscal policy is accompanied by ac-

Table 4

Spain: real GDP

percent changes

	1979	*est. 1980*	*proj. 1981*
Domestic demand	0.9	1.5	1.0
Private consumption	0.9	1.0	0.5
Public consumption	3.8	3.5	3.3
Gross fixed investment	—2.0	0.3	0.5
Changes in stockbuilding[1]	0.3	0.3	0.3
Exports[2]	10.0	3.2	2.0
Imports[2]	12.2	5.5	2.0
Gross domestic product	0.6	1.2	1.0

[1] as a % of GDP in previous year.
[2] goods and services.

Table 5

Spain: trade and current accounts

billions of dollars, transactions basis

	1979	*est. 1980*	*proj. 1981*
Trade balance (CIF)	—7.2	—13.4	—14.7
Energy	—7.3	—12.3	—14.5
Oil	—6.7	—12.1	—14.1
Trade balance (FOB)	—5.7	—11.5	—12.8
Services	5.0	4.4	4.5
Travel	5.6	5.8	6.3
Investment income	—1.1	—1.5	—2.2
Other services	0.5	0.1	0.4
Transfers	1.8	2.1	2.3
Current account	1.1	—5.0	—6.0

comodative monetary policy aimed at helping to revive private investment. Money supply (M3) is targeted to grow by 16½% to 17% this year, and bank credit to the private sector by slightly more, broadly in line with the projected rise in nominal GDP.

Further, energy policy is being strengthened to stimulate investment and to reduce the balance-of-payments deficit. The recent jump in oil prices and the heavy impact of the prolonged drought on hydroelectric power generation (now down to 50% of capacity) inspired acceleration of the nuclear power program last year. Prime Minister Calvo Sotelo has affirmed the strong nuclear orientation. In recent months licenses have been issued for three new nuclear reactors, and five more may be approved this year. Those, plus the three plants in operation and four others under construction, would bring the total to fifteen. The share of nuclear power in total primary energy would thus rise from 3% at present to 25% by 1990. The government also is promoting usage of coal and natural gas. Stronger attempts are being made to conserve oil, through the offer of low-interest loans and tax incentives and by more rapid increases in domestic energy prices. In all, Spain's dependence on oil may be lowered from about 70% of total primary energy at present to 45% by 1990.

The authorities are taking other measures to stimulate private investment. For example, price controls are being relaxed gradually, a more realistic exchange rate is being maintained, and the government is seeking increased flexibility of work rules. Because of the major role foreign-controlled firms have played in Spain's modernization, special efforts are being made to encourage foreign direct investment, recently via an easing of application procedures and a major increase in domestic borrowing limits.

Liberalization of the financial sector is being pursued to promote efficiency and widen the sources of financing for corporate investment projects. For example, entry by foreign banks has been facilitated; interest rates are being freed up and the "privileged circuits" of subsidized credit are being phased out; and bank charges are being clarified.

Moreover, the government is seeking an acceleration of negotiations on Spanish membership in the EEC, to widen market opportunities for Spanish-based firms and to provide added stimulus to modernization.

Assessment of policy

A new urgency and realism are apparent in the priority now being given to Spain's serious economic problems. Potentially beneficial new initiatives have been taken or are planned. The government is providing a strong lead, and the public so far is reacting positively. This can be seen in the more cooperative attitude of the labor unions, some revival in private fixed investment, and a strong stock market.

However, problems accumulated over a period of years will not be quickly resolved, even with the best of policies, steadfast implementation, and sustained public support — none of which is yet assured. The orientation and content of economic policy clearly have improved, but further changes may be necessary. No more than a start has been made in liberalizing work rules and lightening the social security burden on employers. More extensive budgetary reform is required to improve the efficiency of public-sector spending and to curb its growth. Restraint of consumption expenditures, much greater than is envisaged in the 1982 budget, will be needed to

Table 6

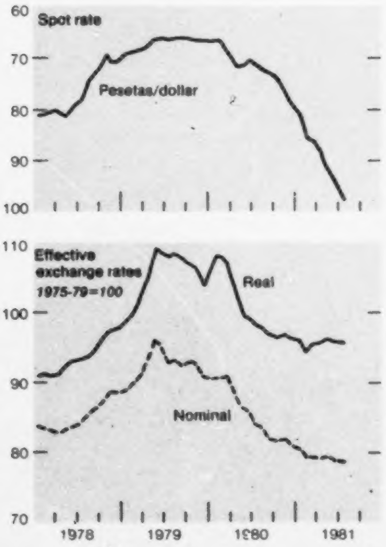
Spain: public-sector budget

billions of pesetas

	1979	*1980*	*projected* *1981*	*projected* *1982*
Revenues	3,747	4,102	4,500	5,300
Expenditures	4,000	4,617	5,200	6,250
Financial balance	—253	—515	—700	—950
(as % of expenditures)	(—6.3)	(—11.2)	(—13.5)	(—15.2)
(as % of GDP)	(—1.9)	(—3.4)	(—4.1)	(—4.9)

Spanish peseta

monthly averages.



lessen public-sector demands on domestic capital markets and to ease private-sector access to credit.

The present strategy of fiscal stimulus accompanied by accomodative monetary policy entails certain risks. Unless investment and output pick up fairly rapidly, unemployment will climb much further and inflationary pressures could increase rather than subside. This could place the central wage agreement under strain and weaken the longer-term chances of economic recovery.

Although extremist partisan activity appears to have subsided in recent months, and a commission has been appointed to recommend principles for devolving powers to regional governments, it remains to be seen whether economic policy can continue to take precedence over political problems. In addition, obstacles to policy implementation persist. There is substantial resistance in some quarters to liberalization of the industrial and financial sectors, and to even a phased reduction of Spain's high external tariffs. Also, administrative bottlenecks still undermine important government programs, e.g., housing construction. Moreover, negotiations on Spanish entry to the EEC are proceeding at a snail's pace. Clearly, sustained support and patience from unions, industry, and the public at large will be needed to ensure both full application of the new approach and an adequate interval to test its efficacy.

Economic outlook

During the first half of 1981, there was little if any growth in real GDP. Unemployment continued to rise. Inflation accelerated temporarily early in the year, but it since has slowed considerably: the CPI increased by 14% in the twelve months to June. The current account deficit widened to an estimated $6 billion at an annual rate (3½% of GDP), under the influence of higher oil prices, sluggish export demand, and the lagged effects of earlier weakness in price competitiveness.

Aside from some improvement in inflation, little change is expected in the next few months. There could be a modest recovery in total demand and output, but at best real GDP may rise by only about 1% this year. Unemployment, therefore, will continue to climb. The current account deficit probably will run at about the same rate as in the first half of the year.

In 1982, the fiscal push and liberalizing measures may trigger some further recovery of investment activity and raise real GDP 2%-2½%. With the maintenance of the wage agreement, stability in world oil prices, and more normal weather, inflation could then abate somewhat.

The current account deficit, however, may worsen modestly in 1982. An improvement in Spain's relative cyclical situation is expected along with a better trend in tourism and increased shipments abroad from the new plant of General Motors. But the adverse impact of this year's drought and heat waves on agricultural trade still will be very apparent, imports related to nuclear and other power plant construction will be on the rise, and there may be some loss of exports because of the phasing-out of subsidized activities.

The main benefits of the economic recovery program are likely to be realized in 1983 and subsequent years. Assuming that adequate support for the Calvo Sotelo government persists and that the business environment is further improved, investment may accelerate sufficiently to push economic growth above a 3% rate and to reduce sharply the pace of increase in unemployment. Price rises could decelerate somewhat further.

Within two to three years the new energy policy should begin to cut oil imports substantially. This, plus some recovery in industrial-country growth, could lessen Spain's external constraint. Improvement in the current account balance will be gradual, however, because the authorities apparently do not favor exchange rate policy as the principal means of strengthening Spain's international competitive position. The real effective peseta rate, after having risen by nearly 20% through mid-1979, has since dropped 13%, to a level that is about 4% below the 1975-1979 average (see chart). The authorities now seem to be aiming at a relatively stable real exchange rate, depreciating the nominal effective rate by only enough to offset the adverse inflation differential.

Large net capital inflows will be needed in the next few years. Net foreign direct investment inflows may average $1 billion yearly, and foreign investment in Spanish real estate half as much. But the bulk of the inflow is likely to be in the form of medium-term financial credits. Spain's outstanding external debt of $28 billion still is moderate for a country of its economic size, so that borrowing abroad should pose little problem as long as the recovery program is seen to be effective.

Although Spain's economic recovery may well be slow, the new administration has made a promising start. Since the performance of Spain — with a population of 37 million and a GDP in excess of $200 billion — has a significant impact on its neighbors, it clearly would be in the interests of Western Europe as a whole if the Calvo Sotelo program were to succeed. Higher priority on an acceleration of presently stymied negotiations on Spanish entry to the EEC would help to achieve that objective and to ensure that a valuable opportunity for revitalizing Spain's economy is not lost.

Statistical appendix

for key to data in tables *see pages 18 and 19.*

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Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

Effective exchange rates

Index numbers, March 1973=100. The index of the effective exchange rate for a currency is a measure of that currency's trade-weighted average appreciation or depreciation vis-à-vis the currencies of 15 other major countries. The exchange rates used in the construction of this index are the averages of daily noon spot exchange rates in New York for months and for weeks ending on dates shown. The trade weights used are based on 1976 bilateral trade in manufactures.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
pre-June 1970 parities	118.5	94.9	79.3	116.2	91.6	97.5	110.9	95.9	98.2	88.3	97.8	97.9	98.1	102.2	92.2	98.4
Smithsonian central rates	107.0	101.3	88.7	116.0	95.4	96.1	108.3	97.0	99.1	91.6	98.0	96.0	96.3	100.5	91.7	98.1
1980																
June	96.2	84.9	113.8	78.7	137.9	90.6	53.1	110.8	118.6	164.3	121.7	92.0	103.0	87.8	74.8	71.4
July	96.0	84.8	111.7	79.3	138.2	91.1	52.7	110.9	119.1	165.5	122.2	92.5	102.8	87.8	75.1	70.0
August	97.2	84.5	111.1	80.5	137.2	90.7	52.7	110.2	119.0	163.8	122.0	91.8	103.3	88.2	75.7	69.6
September	96.4	83.9	115.8	81.4	137.0	90.4	52.4	109.9	119.1	164.7	121.8	91.4	103.3	88.2	75.4	68.4
October	96.8	83.6	119.4	83.2	135.4	89.9	52.0	109.1	118.3	165.5	121.0	90.5	103.2	88.7	75.4	68.3
November	98.9	82.7	118.8	84.9	134.3	89.0	51.7	108.3	117.7	164.5	119.9	89.5	103.6	89.0	76.1	68.6
December	99.9	82.2	122.0	84.8	133.9	88.7	51.4	107.8	117.0	162.5	119.8	89.4	102.6	88.9	76.6	67.5
1981																
January	99.4	82.5	126.7	87.8	132.8	88.3	51.0	107.2	116.2	160.9	119.4	88.0	101.7	88.8	76.6	66.3
February	102.3	82.5	127.3	87.7	131.7	87.1	50.3	106.3	115.0	159.1	118.8	86.4	103.1	90.2	77.4	65.9
March	102.5	83.1	125.4	85.1	134.0	87.0	49.6	106.1	114.8	160.5	119.8	86.2	103.7	90.1	78.1	65.8
April	104.2	83.5	123.0	84.8	133.8	86.7	48.6	106.2	114.4	160.3	120.1	85.7	104.6	90.5	79.0	65.8
May	107.3	83.4	122.2	84.8	132.6	84.8	48.3	106.3	113.3	160.8	119.5	84.7	105.7	90.9	80.3	66.2
June	109.3	83.6	121.9	82.1	131.9	85.0	47.9	105.8	113.1	165.6	119.0	84.6	104.6	91.1	82.1	65.6
June	109.3	83.4	121.5	82.9	131.6	85.3	47.9	105.9	112.9	162.6	119.3	84.3	105.5	91.2	81.5	65.9
12	109.9	83.6	121.1	81.6	131.9	85.1	47.9	105.9	113.0	164.1	118.9	84.6	105.0	91.0	81.9	65.5
19	108.7	83.5	123.1	82.2	132.0	85.0	48.0	105.8	113.2	165.7	119.1	84.8	104.6	91.0	82.0	65.5
26	109.1	83.8	122.1	81.9	132.0	84.4	48.0	105.8	113.2	168.3	118.9	84.8	104.1	91.1	82.5	65.5
July 3	110.0	84.0	120.8	80.0	131.8	85.0	48.0	105.6	113.3	168.7	119.3	85.0	103.9	91.3	83.5	65.3
10	111.1	84.0	120.5	80.2	131.2	84.7	47.9	105.4	113.0	168.4	119.1	84.6	104.3	91.3	84.0	65.1
17	110.8	84.1	119.4	79.3	131.9	85.2	47.8	105.6	113.2	168.7	119.2	85.0	104.0	91.1	84.1	65.2
24	112.0	83.4	118.0	79.0	131.5	85.1	48.0	105.7	113.2	168.2	119.5	85.2	104.3	91.0	84.6	64.9

Real effective exchange rates

Index numbers, March 1973=100. The index of the real effective exchange rate is the index of the effective exchange rate adjusted for inflation differentials which are measured by wholesale prices of nonfood manufactures. Exchange rates and trade weights used in the construction of this index are the same as those used for effective exchange rate indices. Annual figures are averages of months.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
1977	100.9	99.2	93.3	101.6	102.7	96.5	92.3	99.9	104.0	105.6	109.5	97.3	99.0	105.2	91.8	101.3
1978	96.4	92.1	106.9	106.4	103.3	97.2	90.8	99.8	103.9	122.3	109.6	103.5	94.7	96.7	87.0	97.2
1979	96.5	92.2	95.7	118.8	104.1	99.2	90.6	97.3	100.4	115.7	108.4	101.5	89.6	99.5	85.9	109.3
1980	98.2	91.3	93.5	138.3	101.0	100.8	93.0	92.7	97.0	105.5	109.1	94.0	91.6	101.0	87.3	103.4
1980																
July	96.4	91.4	94.9	138.5	101.5	101.4	92.8	92.9	97.7	106.2	110.4	95.6	91.2	100.2	86.8	101.7
August	97.4	91.2	94.5	140.6	100.5	102.4	92.8	91.6	97.3	104.3	109.9	95.3	90.9	100.8	88.2	101.6
September	96.0	91.3	98.4	142.3	100.0	102.1	93.2	92.0	96.8	104.6	109.6	93.7	91.8	101.1	88.1	100.6
October	97.7	90.7	99.4	144.6	99.0	101.4	92.7	91.6	95.6	104.7	108.4	93.5	92.2	101.3	87.9	100.3
November	99.8	89.9	98.1	147.1	98.4	99.7	93.0	91.7	94.5	104.5	107.0	92.4	92.9	101.6	89.0	100.9
December	100.8	89.3	99.9	146.1	97.8	100.9	92.8	91.0	93.6	103.1	107.4	92.6	92.1	101.5	89.7	100.1
1981																
January	100.6	90.1	102.1	151.9	96.4	99.3	93.4	89.9	94.8	101.1	107.7	89.4	92.3	102.1	89.5	100.0
February	104.3	89.5	100.9	151.5	95.1	99.2	92.3	89.5	93.3	100.0	106.6	87.9	94.5	103.9	91.0	98.3
March	104.8	90.0	98.1	146.3	96.6	99.1	92.4	89.2	92.7	100.9	107.2	88.9	95.7	103.8	91.8	99.2
April	107.2	89.8	95.4	146.6	96.3	99.4	90.6	88.3	92.5	99.7	107.6	89.2	96.4	104.5	92.7	99.3
May	109.8	90.4	94.7	145.9	95.1	97.1	91.1	89.0	91.6	100.1	106.1	89.0	97.1	104.7	94.3	100.4
June	111.9	90.7	93.0	141.2	94.4	97.4	91.3	88.5	91.4	102.9	105.3	89.3	96.5	105.6	96.8	100.1

Euro-currency market size

based on foreign-currency liabilities and claims of banks in major European countries, the Bahamas, Bahrain, Cayman Islands, Panama, Canada, Japan, Hong Kong, and Singapore
billions of dollars (rounded to nearest $5 billion), at end of period

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
											Mar[p]
Estimated size											
Gross	150	205	310	390	480	590	725	930	1 190	1 470	1 540
Liabilities to nonbanks	30	35	55	75	80	100	125	170	230	270	n.a.
Liabilities to central banks	15	25	40	60	70	85	110	120	155	180	n.a.
Liabilities to other banks[a]	105	145	215	255	330	405	490	640	805	1 020	n.a.
Net	85	110	160	215	250	310	380	485	600	735	770
Claims on nonbanks	35	45	65	100	115	150	195	245	295	365	n.a.
Claims on central banks and on banks outside market area[b]	35	45	75	95	115	135	155	195	245	295	n.a.
Conversions of Euro funds into domestic currencies by banks in market area[c]	15	20	20	20	20	25	30	45	60	75	n.a.
Euro-dollars as % of gross liabilities in all Euro-currencies	76	78	73	77	78	79	76	74	72	76	n.a.

[a] Includes unallocated liabilities
[b] Includes unallocated claims
[c] In European market area only
[r] revised
[p] preliminary

Euro-currency deposit rates

prime banks' bid rates in London, at or near end of month

	1977	1978	1979	1980		1981					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Euro-dollar:											
overnight	7.12	10.62	14.00	18.50	19.25	17.50	15.75	15.00	17.17	17.62	19.12
7-day fixed	6.31	10.62	14.00	18.50	19.75	17.50	15.50	14.37	16.00	17.50	18.50
one month	6.87	11.00	14.37	18.37	19.12	17.68	16.81	14.81	17.75	17.87	18.12
three months	7.19	11.69	14.44	18.06	17.62	17.50	16.62	14.81	16.87	17.75	17.81
six months	7.50	12.31	14.44	16.87	16.75	16.75	16.75	14.81	17.00	16.94	17.25
twelve months	7.67	12.00	12.87	15.50	14.87	15.75	16.06	14.81	16.31	16.12	16.31
Euro-mark:											
one month	2.19	3.19	8.50	9.69	8.87	9.31	14.87	12.31	12.12	12.25	12.25
three months	2.50	3.31	8.56	9.56	8.87	9.37	14.25	12.31	12.44	12.68	12.37
six months	2.81	3.69	8.56	9.31	8.87	9.37	13.37	12.00	12.44	12.68	12.37
twelve months	3.06	3.81	8.12	9.37	8.93	9.31	12.75	11.43	12.00	12.68	12.31
Euro-Swiss franc:											
one month	1.31	—.06	5.19	6.12	6.00	5.50	8.37	7.50	9.50	9.62	9.37
three months	1.37	0.00	5.75	6.12	6.00	6.00	8.37	7.62	9.50	10.00	9.87
six months	1.87	0.12	5.87	6.12	5.75	6.00	8.37	7.62	9.50	10.12	9.87
twelve months	2.25	0.62	5.56	6.19	5.50	6.12	7.62	7.62	9.50	9.37	9.12
Euro-sterling:											
one month	6.50	12.00	16.75	14.50	14.75	14.25	13.75	12.50	12.37	11.87	11.81
three months	6.62	12.62	16.75	14.62	14.75	13.75	12.75	12.50	12.37	12.37	12.50
six months	7.12	13.25	16.75	14.44	14.25	13.12	12.12	12.37	12.37	12.75	12.81
twelve months	7.37	13.00	15.25	14.00	14.00	13.12	12.00	12.18	12.37	12.87	13.12
Euro-French franc:											
one month	12.25	10.50	13.87	10.50	11.12	10.37	11.75	12.00	13.12	22.50	26.00
three months	13.25	9.87	14.00	11.37	11.75	10.87	12.87	12.37	13.50	19.50	23.00
six months	14.00	9.87	14.12	12.37	12.25	11.87	13.00	12.50	13.62	18.50	21.00
twelve months	13.25	10.25	13.75	13.00	12.87	12.62	13.00	13.00	13.62	17.00	19.00
Euro-yen:											
one month	0.62	—.69	7.62	10.25	9.12	8.25	8.62	7.75	6.62	7.12	7.00
three months	1.81	0.62	8.31	10.12	9.25	8.50	8.62	7.62	7.37	7.75	7.50
six months	2.75	1.87	8.62	10.12	9.62	8.50	8.37	7.75	7.37	7.87	7.87
twelve months	3.25	2.19	7.94	9.37	9.37	8.50	8.37	7.81	7.37	8.25	7.87

Euro-currency bank credits

publicly-announced in period, in millions of dollars

	1978	1979	1980	1981			Jan-Jul	
				May	Jun[r]	Jul[p]	1981	1980
Industrial countries	**28 952**	**27 248**	**39 100**	**1 826**	**1 986**	**40 762**	**56 762**	**17 927**
Australia	212	941	2 475	—	196	—	367	603
Canada	5 705	1 845	1 743	100	—	3 100	3 440	456
Denmark	2 242	1 205	1 720	—	26	101	1 027	1 055
Finland	550	92	1 040	21	—	115	376	1 046
France	1 914	2 955	1 745	30	—	612	2 622	1 361
Greece	508	1 009	1 333	—	14	220	844	783
Ireland	616	687	237	100	88	90	552	—
Italy	2 485	3 708	6 268	660	533	95	3 506	3 358
Norway	1 517	935	685	49	61	—	157	377
Spain	2 426	4 184	5 457	375	270	25	2 378	2 667
Sweden	1 872	1 263	1 370	—	50	—	1 480	1 183
United Kingdom	3 898	795	1 470	200	—	112	382	898
United States	1 206	2 348	6 719	50	353	36 142	37 462	1 007
Other[a]	3 801	5 281	6 838	241	405	150	2 169	3 139
Developing countries	**37 290**	**47 964**	**33 825**	**3 006**	**4 676**	**2 103**	**23 618**	**18 203**
Non-OPEC countries	26 669	35 225	23 535	2 777	3 600	1 370	18 755	10 887
Argentina	1 461	2 965	2 506	200	140	—	972	1 371
Brazil	5 634	6 278	4 158	442	476	646	3 186	1 639
Chile	1 045	867	1 322	265	57	45	1 084	485
Korea	2 651	3 258	1 917	59	716	231	1 659	1 118
Malaysia	858	1 168	—	—	40	—	585	—
Mexico	7 250	8 243	5 971	748	797	20	4 894	2 602
Morocco	605	499	420	—	102	—	542	249
Peru	—	596	480	30	359	166	987	283
Philippines	2 073	2 067	1 056	215	262	—	724	466
Taiwan	254	1 063	314	73	53	—	601	64
Other[b]	4 838	8 221	5 391	745	598	262	3 521	2 610
OPEC countries	10 621	12 739	10 290	229	1 076	733	4 863	7 316
Algeria	2 576	1 906	40	—	—	—	—	40
Indonesia	1 118	1 061	1 435	78	7	—	305	829
Nigeria	825	1 373	1 330	48	320	155	1 017	484
United Arab Emirates	726	401	101	8	—	50	58	59
Venezuela	2 054	6 830	6 715	—	749	228	2 637	4 829
Other	3 322	1 168	669	95	—	300	846	1 075
Communist countries	**3 767**	**7 325**	**2 809**	—	**152**	**99**	**1 211**	**1 328**
China	—	3 395	181	—	—	50	50	72
East Germany	642	796	303	—	100	—	400	76
Hungary	700	260	550	—	—	—	550	249
Poland	374	849	800	—	—	—	—	354
Other[c]	2 051	2 025	975	—	52	49	211	577
International organizations	**160**	**275**	**429**	**20**	—	—	**70**	**409**
TOTAL	**70 169**	**82 312**	**76 163**	**4 852**	**6 824**	**42 964**	**81 661**	**37 867**

a includes multi-national organizations *b* includes regional development organizations *c* includes COMECON institutions *p* preliminary
r revised

International bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980		1981					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
U.S. companies:											
U.S. dollar	7.95	8.55	10.13	11.46	11.76	11.94	12.17	12.46	12.51	12.64	12.32
Swiss franc	5.31	5.70	6.61	7.38	7.27	7.44	7.26	7.42	7.46	7.55	7.31
European companies:											
U.S. dollar	8.42	9.21	10.93	12.23	12.42	12.53	13.06	12.94	12.99	13.81	13.85
German mark	6.80	6.84	7.55	8.82	8.79	8.85	9.58	9.16	9.18	9.71	9.71
Governments:											
U.S. dollar	8.42	9.12	10.66	11.27	11.83	11.93	12.37	12.37	12.43	12.92	12.70

New international bond issues

new issues in period, in millions of dollars

	1978	*1979*	*1980*	*1981*			*Jan-Jul*	
				May	*June*	*July*	*1981*	*1980*
By type:								
Euro-bonds, total	**14 125**	**18 726**	**23 970**	**1 707**	**3 612**	**2 540**	**15 217**	**14 787**
by category of borrower								
U.S. companies	1 122	2 872	4 107	263	800	477	3 027	2 223
Foreign companies	4 540	7 183	9 032	1 036	1 291	1 343	6 222	5 193
State enterprises	3 291	4 524	5 839	348	657	305	3 289	3 858
Governments	3 643	2 433	3 045	—	218	265	1 189	2 102
International organizations	1 529	1 714	1 947	60	646	150	1 490	1 411
by currency of denomination								
U.S. dollar	7 290	12 565	16 427	1 305	3 370	2 372	12 936	10 225
German mark	5 251	3 626	3 607	96	32	33	230	2 263
Dutch guilder	394	531	1 043	60	57	—	364	613
Canadian dollar	—	425	279	—	42	—	42	214
European unit of account	165	253	65	—	43	42	117	25
Other	1 025	1 326	2 549	246	68	93	1 528	1 447
Foreign bonds outside the United States, total	**14 359**	**17 749**	**14 521**	**744**	**921**	**1 321**	**7 349**	**8 350**
by category of borrower								
U.S. companies	245	217	307	—	49	11	281	219
Foreign companies	2 110	3 463	3 157	242	215	568	2 074	1 547
State enterprises	3 163	3 284	2 830	224	246	366	2 124	1 533
Governments	5 771	7 663	4 086	155	226	135	1 211	2 803
International organizations	3 070	3 122	4 141	123	185	241	1 659	2 248
by currency of denomination								
German mark	3 789	5 379	4 839	22	42	62	521	3 262
Swiss franc	5 698	9 777	7 617	403	568	902	4 612	4 268
Dutch guilder	385	75	259	24	23	74	253	107
Japanese yen	3 826	1 833	1 088	92	269	217	1 351	502
Other	671	685	718	203	19	66	612	211
Foreign bonds in the United States, total	**5 795**	**4 515**	**3 429**	**220**	**925**	**646**	**3 831**	**1 729**
by category of borrower								
Canadian entities	3 142	2 193	2 136	120	825	450	2 906	870
International organizations	459	1 100	550	—	—	—	—	350
Other	2 194	1 222	743	100	100	196	925	509
By country of borrower:								
Industrial countries	**24 964**	**31 886**	**32 732**	**2 053**	**4 057**	**3 751**	**20 959**	**19 518**
Australia	1 218	593	539	—	89	130	345	230
Austria	1 027	1 218	1 859	49	144	211	858	1 104
Canada	4 764	4 197	3 797	343	1 182	945	5 062	2 168
Denmark	1 017	752	1 125	47	41	187	401	684
Finland	952	699	392	106	138	—	354	316
France	1 286	2 106	2 820	167	506	273	2 136	1 400
Japan	3 467	5 775	5 309	675	599	558	3 436	2 683
Netherlands	250	832	1 585	—	43	69	254	1 029
Norway	2 751	1 954	892	18	69	32	221	577
Sweden	876	1 530	3 244	29	50	43	1 116	1 948
United Kingdom	1 365	1 181	1 733	29	25	250	609	1 219
United States	2 973	6 767	5 587	263	849	488	3 308	3 614
Developing countries	**4 227**	**3 093**	**2 485**	**435**	**570**	**365**	**2 259**	**1 289**
Non-OPEC countries	2 684	2 675	1 942	285	570	365	1 948	1 068
Brazil	843	930	349	—	—	14	60	292
Mexico	568	363	544	100	445	301	1 368	288
Philippines	170	175	70	—	—	—	30	—
OPEC countries	1 543	418	543	150	—	—	311	220
Algeria	721	208	—	—	—	—	—	—
Venezuela	588	55	398	125	—	—	221	120
Communist countries	**30**	**75**	**65**	—	—	—	**30**	**50**
Hungary	—	—	65	—	—	—	—	50
International organizations	**5 058**	**5 936**	**6 638**	**183**	**831**	**391**	**3 149**	**4 009**
TOTAL	**34 279**	**40 990**	**41 920**	**2 671**	**5 458**	**4 507**	**26 397**	**24 866**

Central bank discount rates

	1977	1978	1979	1980		1981		Current	
	end Dec	end Dec	end Dec	end Sep	end Dec	end Mar	end Jun	Jul 28 1981	effective since
United States	6.00	9.50	12.00	11.00	13.00	13.00	14.00	14.00	May 5, 81
Canada	7.50	10.75	14.00	11.20	17.36	16.69	19.08	19.89	Jul 23, 81
Japan	4.25	3.50	6.25	8.25	7.25	6.25	6.25	6.25	Mar 18, 81
United Kingdom	7.00	12.50	17.00	16.00	14.00	12.00	12.00	12.00	Mar 11, 81
Belgium	9.00	6.00	10.50	12.00	12.00	16.00	13.00	13.00	May 29, 81
France	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	3.00	3.00	6.00	7.50	7.50	7.50	7.50	7.50	May 2, 80
Italy	11.50	10.50	15.00	16.50	16.50	19.00	19.00	19.00	Mar 23, 81
Netherlands	4.50	6.50	9.50	8.50	8.00	9.00	9.00	9.00	Mar 3, 81
Austria	5.50	4.50	3.75	6.75	6.75	6.75	6.75	6.75	Mar 21, 80
Denmark	9.00	8.00	11.00	12.00	11.00	11.00	11.00	11.00	Oct 27, 80
Finland	8.25	7.25	8.50	9.25	9.25	9.25	9.25	9.25	Feb 1, 80
Ireland	6.75	11.85	16.40	13.50	12.75	12.75	14.40	14.40	May 15, 81
Norway	6.00	7.00	9.00	9.00	9.00	9.00	9.00	9.00	Nov 30, 79
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	Jul 26, 77
Sweden	8.00	6.50	9.00	10.00	10.00	12.00	12.00	12.00	Jan 20, 81
Switzerland	1.50	1.00	2.00	3.00	3.00	4.00	5.00	5.00	May 11, 81
Argentina	165.27	108.19	89.90	69.64	87.01	109.34	143.39	143.39	Jun 19, 81
Korea	14.00	14.50	14.50	17.50	15.50	15.50	15.50	15.50	Nov 11, 80
New Zealand	10.00	10.50	13.00	14.00	14.00	14.00	14.00	14.00	Jul, 80
Philippines	6.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	May 19, 78
Singapore	3.50	4.50	6.75	8.75	10.50	11.00	10.00	10.00	Apr 20, 81
South Africa	9.00	8.50	7.00	7.00	7.00	8.00	10.50	12.50	Jul 21, 81
Venezuela	7.00	7.50	11.00	10.00	13.00	13.00	12.00	12.00	Apr 25, 81

Day-to-day money rates

monthly averages

	1977	1978	1979	1980		1981					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
United States	6.56	10.03	13.78	15.85	18.90	19.08	15.93	14.70	15.50	18.52	19.01
Canada	6.84	9.44	13.83	11.05	15.61	16.93	16.58	16.90	16.79	17.17	18.69
Japan	5.01	4.57	8.02	9.61	9.49	8.91	8.60	8.04	7.19	7.06	7.12
Australia	9.96	8.40	7.84	9.84	9.51	9.69	10.35	11.11	11.83	12.07	13.04
United Kingdom	4.81	10.00	14.87	12.25	13.00	12.19	12.19	11.06	10.15	9.95	9.62
Belgium	7.48	6.73	10.65	10.16	9.68	10.32	9.18	10.13	16.51	13.00	9.58
France	9.30	6.67	12.17	10.74	10.87	10.73	10.91	11.72	12.23	16.03	19.93
Germany	3.24	3.61	9.15	8.82	9.13	9.13	10.57	11.25	11.27	11.79	11.93
Italy	11.37	11.00	16.00	17.62	17.50	17.37	17.37	19.62	19.62	19.75	20.00
Netherlands	5.27	10.00	15.67	9.00	8.37	8.95	9.12	9.75	9.50	10.88	11.13
Austria	9.25	5.37	8.50	11.50	11.50	9.50	9.00	11.00	12.00	9.00	12.25
Finland	22.99	9.29	13.53	12.50	12.50	12.50	12.50	11.72	10.57	11.00	11.00
Ireland	8.00	12.12	16.88	13.38	13.31	13.44	13.38	13.12	15.38	14.12	13.81
Spain	7.22	16.75	9.61	15.24	16.74	15.89	12.50	11.98	13.89	16.80	18.53
Sweden	8.91	6.26	11.99	11.80	11.41	12.75	16.97	15.40	14.20	14.96	14.56
Switzerland	0.85	0.00	1.25	3.37	5.75	3.75	3.50	4.50	5.00	3.62	3.00
Argentina	n.a.	n.a.	78.22	58.04	70.84	74.81	92.07	133.08	96.66	108.76	131.19
Brazil	28.44	35.64	32.28	40.56	49.68	51.60	54.48	56.64	49.32	65.16	54.12
Hong Kong	4.87	9.67	14.19	13.87	14.05	14.18	18.00	16.85	16.43	16.67	16.12
Korea	14.40	15.00	15.00	14.82	14.82	14.82	14.82	14.82	14.82	14.82	14.82
Philippines	14.44	13.22	16.25	13.10	15.70	13.66	14.43	17.34	15.59	16.61	16.12
Singapore	3.59	4.98	10.17	11.06	10.23	11.77	12.73	9.73	6.76	7.92	13.08
South Africa	7.65	7.11	3.81	4.99	5.60	6.22	7.06	7.26	7.49	8.51	8.78
Euro-dollars	6.94	10.80	14.41	16.15	19.22	19.05	16.14	14.57	16.36	18.19	18.75

Treasury bill rates

bond-equivalent yields, at or near end of month

	1977	1978	1979	1980		1981					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
United States	6.33	9.42	12.39	14.84	14.87	15.83	14.80	13.55	15.51	16.00	14.75
Canada	7.17	10.46	13.66	13.70	17.01	16.86	16.83	16.44	17.35	18.43	18.83
Japan	4.15	3.39	5.68	5.93	5.93	5.93	5.93	5.93	5.68	5.68	5.68
Australia	8.35	8.35	9.31	11.47	12.17	12.42	12.68	12.72	13.78	13.22	13.32
United Kingdom	6.42	12.01	16.45	13.38	13.45	13.02	11.93	11.87	11.57	11.78	12.24
Belgium	9.25	9.25	14.40	12.75	12.75	12.10	13.25	15.00	17.00	16.75	15.00
Ireland	6.74	11.83	16.37	12.78	12.84	12.83	12.84	12.70	13.85	14.65	14.72
Italy	12.81	12.81	15.62	16.87	16.87	16.87	16.87	19.18	19.84	21.18	21.36
Netherlands	6.00	9.50	12.75	8.75	8.00	8.75	8.75	9.25	9.75	11.75	12.00
Spain	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13.25	17.00	17.00
Sweden	9.21	5.84	9.74	12.90	12.87	16.85	16.85	15.73	15.73	15.77	13.97
Argentina	109.06	82.55	71.04	60.73	66.19	69.10	90.06	107.97	86.79	104.34	121.03
Brazil	38.08	41.21	27.84	66.34	76.84	78.24	73.58	70.46	71.33	71.88	72.98
Korea	16.88	17.01	19.53	16.35	16.35	18.98	18.98	18.98	18.98	18.16	16.00
Mexico	n.a.	12.75	17.89	25.81	27.73	28.87	28.76	28.55	28.36	n.a.	n.a.
New Zealand	7.50	10.50	11.25	11.25	11.25	11.50	11.25	11.25	11.25	11.25	11.25
Philippines	10.04	12.08	12.63	12.75	12.74	12.65	12.65	12.69	12.76	12.76	13.20
Singapore	3.17	4.01	6.18	6.86	6.77	6.86	6.84	6.60	6.58	6.57	6.34
South Africa	8.17	7.61	4.30	5.71	6.31	6.89	7.59	7.82	7.89	9.08	10.26

Representative money-market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money-market instruments, other than Treasury bills, at or near end of month

	1977	1978	1979	1980		1981					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
United States	6.84	10.57	13.70	17.15	17.62	16.67	15.48	14.25	16.80	16.94	17.07
Canada	7.25	10.62	14.15	14.10	17.50	16.95	16.85	17.05	17.55	19.00	19.35
Japan	5.89	4.64	8.01	9.80	9.80	8.32	8.37	7.34	6.76	7.52	7.20
Australia	9.75	9.10	10.30	11.75	13.00	13.25	14.00	15.10	15.75	15.50	16.00
United Kingdom	6.50	12.50	17.00	14.50	14.75	13.19	12.50	12.50	12.37	12.44	12.56
Belgium	9.50	9.25	14.45	13.00	13.10	12.35	13.00	14.00	17.00	16.85	15.25
France	9.19	6.44	12.62	11.44	11.56	11.25	13.50	12.75	13.37	18.25	18.25
Germany	3.60	3.70	8.70	9.45	10.20	9.45	14.50	13.30	12.90	13.30	12.90
Ireland	6.75	13.00	18.12	13.75	13.62	13.87	14.78	14.00	15.37	15.94	15.88
Italy	11.75	11.37	17.12	17.37	17.37	17.37	17.50	19.75	19.75	20.00	20.50
Netherlands	6.25	10.50	13.00	10.00	9.37	9.50	11.25	10.37	11.25	12.25	11.87
Spain	12.06	22.80	13.20	16.00	17.40	17.40	15.00	13.20	13.79	16.28	17.02
Switzerland	2.02	0.50	6.12	6.12	7.50	6.00	8.50	9.37	10.00	10.50	10.37
Hong Kong	5.73	11.82	14.37	15.87	17.69	15.53	16.86	16.27	16.45	17.55	17.00
Korea	16.68	17.01	19.53	16.35	16.35	16.35	16.35	16.35	15.60	15.70	15.70
New Zealand	11.87	12.00	16.00	14.10	14.25	14.35	14.80	15.60	14.70	14.50	13.90
Philippines	11.96	11.48	10.41	13.15	15.01	15.98	16.86	16.63	16.67	17.50	16.66
Singapore	4.81	7.38	10.12	14.12	14.12	14.25	13.69	11.69	10.06	12.44	12.31
South Africa	9.00	7.85	4.72	6.07	7.12	8.42	9.73	9.89	9.84	12.37	15.05

Commercial bank deposit rates

at or near end of month

	1977	1978	1979	1980		1981					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
United States	6.80	10.90	13.55	17.07	16.25	16.00	14.75	13.50	16.75	16.75	17.15
Canada	7.25	10.45	14.05	13.95	17.00	16.90	17.15	16.85	17.50	18.50	19.30
Japan	3.25	2.50	8.37	9.90	9.00	8.72	8.25	7.25	7.35	7.40	7.60
Australia	9.50	8.50	10.25	11.21	12.71	12.85	14.14	14.95	16.17	15.43	15.23
United Kingdom	6.37	12.25	16.81	14.44	14.87	13.44	12.37	12.44	12.41	12.50	12.56
Belgium	9.50	9.87	14.50	13.00	12.63	12.13	13.50	15.50	16.75	16.50	15.25
France	9.00	6.50	12.50	11.50	11.25	11.25	12.00	13.00	15.00	16.00	17.00
Germany	3.40	3.50	7.75	8.75	8.00	8.70	13.50	12.50	11.75	12.25	12.00
Italy	17.00	12.50	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25
Netherlands	7.00	11.62	13.50	10.25	9.50	9.62	11.50	10.50	11.50	12.25	11.87
Austria	9.00	6.75	8.50	11.50	11.25	10.00	9.75	11.50	11.75	12.50	12.50
Denmark	8.00	7.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Finland	4.25	3.25	4.25	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Ireland	6.87	12.75	17.87	13.75	13.62	13.50	14.62	13.50	15.12	15.75	15.63
Norway	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Spain	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	12.00	13.00	13.00
Sweden	7.75	6.25	8.75	9.75	9.75	11.75	11.25	11.25	11.25	11.25	11.25
Switzerland	1.12	0.12	4.75	6.12	7.50	6.12	8.50	7.25	8.50	9.00	9.00
Argentina	n.a.	86.63	72.64	62.00	72.00	76.50	97.00	130.00	87.00	123.00	150.00
Brazil	39.60	46.80	45.00	61.20	69.48	72.00	72.84	73.44	75.36	76.20	75.48
Hong Kong	1.75	4.50	9.25	13.00	13.00	13.00	13.25	13.00	13.00	13.00	13.00
Korea	13.20	15.00	15.00	14.82	14.82	14.82	14.82	14.82	14.82	14.82	14.82
Mexico	11.00	12.00	16.75	23.25	26.15	27.13	27.00	26.65	26.70	n.a.	n.a.
New Zealand	11.00	12.00	15.90	13.50	13.50	13.75	14.00	14.50	14.30	14.60	14.00
Philippines	8.50	8.50	10.50	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Singapore	5.31	7.31	10.31	13.50	13.19	12.62	12.19	10.75	9.12	11.88	11.31
South Africa	8.70	7.30	4.82	6.62	7.87	9.25	10.75	10.27	10.87	13.37	15.75
Venezuela	7.00	7.25	15.00	12.00	16.00	16.00	16.00	14.00	14.00	14.00	14.00

Commercial bank lending rates to prime borrowers

at or near end of month

	1977	1978	1979	1980		1981					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
United States	7.75	11.75	15.25	17.75	21.50	20.00	19.00	17.00	18.00	20.50	20.00
Canada	8.25	11.50	15.00	14.50	18.25	18.25	18.25	17.75	18.25	19.50	20.00
Japan	5.47	4.50	6.51	8.58	8.16	7.94	7.86	7.74	7.52	7.35	7.10
Australia	11.50	11.00	10.75	12.50	13.50	13.50	13.50	14.25	15.00	15.00	15.75
United Kingdom	8.00	13.50	18.00	15.00	15.00	15.00	15.00	13.00	13.00	13.00	13.00
Belgium	10.00	10.00	15.25	15.75	15.75	15.25	15.25	16.50	19.25	18.75	17.50
France	10.30	9.80	12.50	12.25	12.25	12.25	13.00	13.75	13.75	17.00	15.90
Germany	6.00	5.50	9.75	11.50	11.50	11.50	12.00	13.75	13.75	14.25	14.25
Italy	16.00	15.00	19.50	21.00	20.50	20.50	21.00	22.50	22.50	21.50	21.50
Netherlands	7.00	12.00	15.00	10.75	10.75	10.50	10.75	11.25	11.25	13.25	13.25
Austria	9.75	8.75	8.50	12.25	12.50	12.50	12.50	12.50	12.50	13.00	13.50
Denmark	12.50	10.00	13.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75	14.00
Finland	8.85	7.87	9.06	9.82	9.83	9.84	9.84	9.85	n.a.	n.a.	n.a.
Ireland	8.25	13.75	16.00	14.50	14.50	14.50	14.50	14.50	14.50	15.50	15.50
Norway	8.33	11.00	11.00	12.50	12.50	12.50	12.50	12.50	12.50	13.75	13.75
Spain	9.00	9.00	9.00	17.01	18.50	18.72	16.92	15.46	15.11	17.25	18.25
Sweden	10.25	8.50	10.75	11.75	11.75	13.75	13.75	13.75	13.75	13.75	13.75
Switzerland	5.75	5.00	5.00	5.75	5.75	5.75	6.00	6.50	7.00	7.00	7.00
Argentina	152.08	86.75	80.00	66.00	77.00	81.00	114.00	146.00	90.00	141.00	181.00
Brazil	52.05	61.70	57.00	88.00	88.00	133.75	133.75	133.75	133.75	127.38	129.50
Hong Kong	4.75	8.75	14.50	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00
Korea	15.00	18.50	18.50	19.50	19.50	19.50	19.50	19.50	19.50	19.50	19.50
Mexico	17.00	17.50	19.00	22.77	24.25	25.46	25.98	26.59	26.91	27.22	29.66
New Zealand	8.50	9.75	11.75	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Philippines	14.00	14.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
Singapore	7.02	7.65	9.50	13.55	13.60	14.30	14.30	13.68	12.72	12.55	13.40
South Africa	12.50	11.50	9.50	9.50	9.50	10.00	11.00	11.50	11.50	13.00	14.00
Venezuela	9.50	10.25	13.00	12.00	15.00	15.00	15.00	13.00	13.00	13.00	13.00

Domestic government bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980		1981					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
United States	7.97	9.00	10.20	12.25	11.46	12.76	13.16	13.21	14.13	13.52	13.44
Canada	8.77	9.68	11.32	13.01	12.69	12.96	13.38	13.48	15.07	14.96	15.03
Japan	6.40	6.40	8.63	9.26	9.04	8.84	8.89	8.67	8.84	9.23	9.20
Australia	9.50	8.90	10.45	12.60	13.00	13.10	13.10	13.10	13.10	13.10	13.20
United Kingdom	10.53	12.75	13.83	12.65	13.05	13.25	13.36	12.86	13.18	13.50	13.98
Belgium	8.76	8.80	11.13	12.61	13.04	13.19	13.44	13.57	13.52	13.85	14.18
France	11.07	9.94	12.59	14.24	14.31	14.58	15.05	14.98	14.95	17.25	17.35
Germany	5.52	6.65	7.91	8.59	9.19	9.07	10.38	9.97	10.12	10.68	10.30
Italy	10.82	10.89	11.28	12.42	12.12	12.44	12.88	14.46	14.53	14.27	13.81
Netherlands	8.11	8.48	9.29	10.46	10.48	10.43	10.96	11.38	11.29	11.89	11.43
Austria	9.00	7.91	8.20	10.11	9.62	9.80	10.06	10.33	10.18	10.36	n.a.
Denmark	16.83	17.27	18.28	19.72	19.98	19.01	19.29	19.67	20.26	20.59	20.75
Finland	10.25	9.19	9.58	10.43	10.42	10.92	10.92	10.96	10.97	10.96	10.96
Ireland	11.30	13.44	16.64	14.91	15.63	16.22	16.01	16.12	16.57	16.99	17.31
Norway	8.37	8.19	10.04	10.44	10.44	11.70	11.50	11.57	11.65	11.65	11.65
Spain	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13.00	12.75	12.75
Sweden	9.84	10.09	11.22	12.71	12.61	12.66	n.a.	n.a.	n.a.	n.a.	n.a.
Switzerland	3.75	3.03	4.20	4.67	4.63	4.79	5.20	5.40	5.79	5.85	5.59
Argentina	181.65	112.18	47.94	101.38	36.84	34.97	42.99	66.43	65.64	144.24	108.79
New Zealand	10.00	10.02	12.98	12.96	12.99	12.81	12.97	12.88	12.85	12.85	n.a.
Philippines	13.40	13.40	13.20	13.40	13.40	13.40	13.40	13.40	13.42	13.41	13.41
South Africa	10.75	9.85	9.44	11.54	11.81	12.48	12.73	12.75	12.69	13.03	13.05
Venezuela	7.24	7.24	7.29	7.43	7.39	7.44	7.40	7.30	10.00	10.00	10.00

Domestic corporate bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980		1981					
	Dec	Dec	Dec	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
United States	8.30	9.25	10.75	13.38	13.00	13.63	14.13	14.00	15.00	14.25	14.63
Canada	9.71	10.34	12.07	13.72	13.62	13.84	14.34	14.41	16.03	15.94	15.93
Japan	6.68	6.94	8.34	8.60	8.60	8.49	8.25	8.15	7.95	8.09	8.22
Australia	11.00	10.25	11.65	14.00	14.25	14.25	14.10	14.25	14.50	15.00	15.25
United Kingdom	11.88	13.53	14.96	13.63	14.21	14.20	14.14	14.35	14.44	14.94	15.31
France	12.09	10.27	12.92	14.83	15.23	14.62	15.13	15.39	15.39	15.35	15.37
Germany	5.92	6.80	8.20	9.30	9.50	9.50	10.00	10.90	10.90	11.40	11.70
Italy	10.71	10.12	10.22	12.65	12.99	12.80	13.05	16.82	17.01	19.84	20.02
Netherlands	7.90	8.62	9.95	10.33	10.71	10.46	10.77	11.21	11.07	11.76	11.66
Norway	8.59	8.37	10.53	11.24	11.24	11.75	12.07	12.36	12.76	12.76	12.76
Spain	11.58	13.49	14.20	15.10	14.82	14.28	14.36	14.55	14.73	14.51	n.a.
Sweden	9.83	10.03	10.21	12.10	11.95	13.37	13.46	13.56	13.63	13.66	n.a.
Switzerland	4.96	4.85	5.53	5.78	5.63	5.78	5.93	6.08	6.08	6.44	6.33
Korea	19.60	24.00	32.50	23.50	26.30	26.30	24.70	23.00	22.30	22.30	22.30
Mexico	17.56	20.37	21.99	27.55	28.03	28.33	30.90	30.20	30.97	28.92	30.71
Venezuela	10.39	12.43	14.55	14.78	16.15	16.65	16.20	16.00	16.25	16.30	16.50

Key to data in tables

I. International markets

Definitions

An *international bond* issue is one sold outside the country of the borrower. It may be either a Euro-bond issue or a foreign bond issue.

A *Euro-bond* issue is one underwritten by an international syndicate and sold principally in countries other than the country of the currency in which the issue is denominated.

A *foreign bond* issue is one underwritten by a syndicate composed of members from one country, sold principally in that country, and denominated in the currency of that country.

A *Euro-currency bank credit* is a loan in a currency which is not native to the country in which the bank office making the loan is located.

Data on *new international bond issue volume* include all publicly announced issues with an original maturity of three years or more, whether publicly or privately placed, but exclude those where the investor is a central bank, monetary authority, or government.

Data on *new Euro-currency bank credit volume* include all publicly announced loans with an original maturity of more than one year. A loan is included in the period in which the lending banks make a commitment covering the amount and terms of the loan to the borrower.

Categories of borrower

U.S. companies include both parent companies and their financing affiliates, either domestic or foreign.

Other companies include private companies domiciled outside the United States and their affiliates.

State enterprises include public agencies.

Governments include central and local governments.

Country of borrower

The country of the borrower is the residence of the borrowing entity, except where the entity is a financing vehicle, in which case the residence of the parent company and or guarantor is used.

International bond yields

Yields are calculated to the nearest day of maturity. Interest on bonds with annual coupons is discounted semiannually for comparability in computation of yield.

The yield indices are simple arithmetic averages of end-of-month secondary market yields for groups of selected straight-debt securities. Yield indices for six categories of bonds have been calculated according to borrower and currency. They are based on issues of good-quality, well-known borrowers. Occasionally the individual issues in each category are changed.

The number of issues represented in each of the indices is as follows:

Long-Term, U.S. companies, U.S. dollar — —ten Euro-bond issues.

Long-term, U.S. companies, Swiss franc — four foreign bond issues.

Long-term, European companies, U.S. dollar — ten Euro-bond issues.

Long-term, European companies, German mark — ten Euro-bond issues.

Long-term, governments, U.S. dollar — six Euro-bond issues (governments of Italy, Denmark, and France).

Euro-currency deposit rates

All data are prime banks' bid rates for deposits in London. Offer rates commonly used as a basis for Euro-dollar lending are generally .125% above bid rates.

II. Domestic markets

Day-to-day money rates

Argentina — 7-day interbank money.

Austria — day-to-day interbank rate.

Australia — approximate effective interest rate in the authorized short-term money market.

Belgium — interbank call money.

Brazil — overnight financing of Treasury bills (LTN) until November 1978. New series as of December 1979, rates paid for federal funds.

Canada — chartered banks' day-to-day loans.

Finland — Bank of Finland call money.

France — interbank call money against private paper.

Germany — interbank call money.

Hong Kong — interbank 24-hour call rate.

Ireland — interbank call money.

Italy — interbank 48 hour call money.

Japan — Tokyo interbank call money, unconditional lenders rate.

Korea — call money.

Netherlands — open-market call money.

Philippines — interbank call money.

Singapore — interbank overnight money.

South Africa — National Finance Corporation call money.

Spain — day-to-day interbank rate.

Sweden — interbank call money.

Switzerland — call money.

United Kingdom — call money.

United States — effective Federal funds rate.

Euro-dollars — prime banks' bid rate for overnight money.

Treasury bill rates

Argentina — 28-day Treasury bills.

Australia — new issues of 13-week Treasury notes.

Belgium — 3-month Treasury certificates.

Brazil — 91-day Treasury bills (LTN).

Canada — 3-month Treasury bills at tender.

Ireland — 3-month Central Bank Exchequer bills.

Italy — 6-month Treasury bills.

Japan — 60- to 62-day noninterest-bearing discount government bills.

Korea — 3-month Treasury bills until May 1981. New series as of June 1981, 1-month Treasury bills sold by Central Bank.

Mexico — 3-month Federal Treasury bills.

Netherlands — 3-month Treasury bills.

New Zealand — 3-month Treasury bills.

Philippines — 91-day Treasury bills at tender.

Singapore — 91-day Treasury bills at tender.

South Africa — 3-month Treasury bills at tender.

Spain — 3-month Treasury bills.

Sweden — new issues of 3-month Treasury bills.

United Kingdom — 91-day Treasury bills at tender.

United States — 3-month Treasury bills.

Representative money-market rates

Australia — 3-month prime finance company paper.

Belgium — 4-month Fonds des Rentes certificates.

Canada — 3-month prime finance company paper.

France — 3-month interbank money against private paper.

Germany — 3-month interbank deposits.

Hong Kong — 3-month interbank deposits.

Ireland — 3-month interbank deposits.

Italy — 3-month interbank deposits.

Japan — 3-month repurchase agreements.

Korea — 3-month financial bill.

Netherlands — 3-month interbank deposits.

New Zealand — 90-day commercial bills.

Philippines — 90-day promissory notes.

Singapore — 3-month bank acceptances.

South Africa — 90-day bank acceptances.

Spain — 1-month interbank deposits.

Switzerland — 3-month interbank deposits.

United Kingdom — 3-month interbank deposits.

United States — 3-month prime industrial paper.

Commercial bank deposit rates

Argentina — nominal 30-day time deposits. Average of bank rates published by the Central Bank.

Austria — 3-month time deposits.

Australia — 3-month certificates of deposit.

Belgium — special maximum rate for 3-month time deposits in large amounts.

Brazil — 6-month negotiable certificates of deposit of investment banks net of taxes.

Canada — 3-month time deposits.

Denmark — time deposits of 3-months' notice.

Finland — time deposits of six-month notice.

France — 3-month time deposits of FF. 1,000,000.

Germany — 3-month time deposits in large amounts.

Hong Kong — 3-month certificates of deposit. Rate set by the Hong Kong Exchange Banks' Association.

Key to data in tables — continued

Ireland — 3-month time deposits.

Italy — 3-month time deposits of Lit. 100 million or more.

Japan — 3-month time deposits until April 1979. New series as of May 1979, 90-day negotiable certificates of deposit issued by the Tokyo office of Morgan Guaranty Trust Company.

Korea — 3-month time deposits.

Mexico — 3-month certificates of deposit issued by financieras to corporations for amounts over Ps. 1 million. Higher rates available to individuals.

Netherlands — 3-month time deposits in large amounts.

New Zealand — 6-month transferable certificates of deposit.

Norway — 3-month time deposits. Higher rates may be negotiated for 12-month or more time deposits in large amounts.

Philippines — 3-month time deposits.

Singapore — 3-month certificates of deposit.

South Africa — negotiable certificates of deposit.

Spain — maximum legal rate for 3-month deposits until March 1981. New series as of April 1981, deposits over 6-months and less than 1-year for Pts. 1 million or more.

Sweden — deposits at 6-months' notice.

Switzerland — 3-month time deposits.

United Kingdom — 3-month time deposits.

United States — 3-month negotiable certificates of deposit issued by Morgan Guaranty Trust Company.

Venezuela — 6-month negotiable certificates of deposits for large amounts until December 1978. New series as of January 1979, similar rate for domestic depositors only.

Commercial bank lending rates to prime borrowers

Argentina — average rate on 30-day loans.

Austria — overdraft rate for prime borrowers, including commission.

Australia — approximate overdraft rate for prime borrowers.

Belgium — prime overdraft rate.

Brazil — weighted average investment bank lending rates.

Canada — prime rate.

Denmark — approximate rate for loans and advances to prime borrowers.

Finland — average rates on total commercial bank lending.

France — prime lending rate, excluding a commission of .05% per month on highest debit balance during the month.

Germany — approximate effective overdraft rate for prime borrowers.

Hong Kong — prime rate.

Ireland — AA corporate borrowing rate.

Italy — unsecured overdraft rate for prime borrowers.

Japan — average contracted interest rate for short-term loans of city banks. In addition, compensating balances may be required.

Korea — prime rate.

Mexico — base rate or average cost of money for banks determined monthly by the Banco de Mexico S.A.

Netherlands — overdraft rate for prime borrowers, including commission.

New Zealand — overdraft rate for prime borrowers.

Norway — overdraft rate, including a commission of .333% prior to July 1978, .25% thereafter, per quarter on the total line of credit.

Philippines — maximum legal rate, for unsecured loans exclusive of service fee.

Singapore — most common overdraft rate, major banks.

South Africa — unsecured overdraft rate for prime borrowers.

Spain — maximum legal rate for discounting commercial bills plus a commission of 1% per annum until December 1979. New series as of January 1980, preferential rate for 1-month loans calculated by the Bank of Spain.

Sweden — actual interest rate on 3-month loans to prime industrial borrowers.

Switzerland — unsecured overdraft rate for prime borrowers, excluding commission of .25% per quarter on average or highest outstanding debit balance in quarter.

United Kingdom — unsecured overdraft rate for prime borrowers.

United States — prime rate of Morgan Guaranty Trust Company. In addition, compensating balances are required.

Venezuela — representative rate for prime borrowers until December 1978. New series as of January 1979, similar rate for domestic prime borrowers only.

Domestic government bond yields

Argentina — 7% National Adjustable Bond, third series maturing in 1985, inflation adjusted by the Official Correction Index.

Austria — Austrian National Bank average yield on all outstanding government bonds.

Australia — 20-year government bonds.

Belgium — Belgian National Bank average yield on government bonds maturing in more than five years.

Canada — Bank of Canada average yield on all direct government bonds due or callable in 10 years or more.

Denmark — 10% government bond maturing 1983 until December 1977; 10% government bonds maturing 1986 until September 1980. New series as of October 1980, 12% serial bonds maturing 2001.

Finland — rate of interest at issue on central government bonds intended for public subscription, weighted by sales of bonds in the latter half of each month.

France — Institut National de la Statistique et des Etudes Economiques (INSEE) yield on public and semi-public sector bonds.

Germany — Frankfurter Allgemeine Zeitung (FAZ) 7% public authority bond average until September 1978. New series as of October 1978, FAZ 10-year public authority bond average.

Ireland — 15-year government bonds.

Italy — average of yields on six outstanding bonds of public-sector entities.

Japan — secondary market yield for the 6.1% due 1988 national government bond.

Netherlands — Central Bureau of Statistics (CBS) average yield on three latest 7% to 7.75% government bonds.

New Zealand — average yield on government bonds maturing after 10 years.

Norway — 5% government bond of 1996.

Philippines — Central Bank 5-year Certificate of Indebtedness, regular issue.

South Africa — 25-year government bonds.

Spain — 3- to 4-year government guaranteed bonds. Tax credit of 22% available to corporate and private buyers if held to maturity.

Sweden — 15-year government bonds.

Switzerland — Swiss Confederation bond average.

United Kingdom — F.T. (Financial Times) Actuaries 25-year government stock.

United States — Morgan Guaranty 20-year U.S. Government Bond Index.

Venezuela — Banco Central average yield on public-sector bond issues.

Domestic corporate bond yields

Australia — long-term secured debentures, indicated by Australian United Corporation.

Belgium — Belgian National Bank average yield on private corporate bonds maturing in more than five years.

Canada — McLeod, Young, Weir Co. Ltd., average yield on ten industrial bonds.

France — INSEE tax-adjusted average yield on outstanding private corporate bonds.

Germany — FAZ 6% industrial bond average until September 1978. New series as of October 1978, Bundesbank average yield on industrial bonds

Italy — average of yields of four outstanding bonds of leading Italian industrial companies.

Japan — secondary market yield for NTT bond maturing March 1987.

Korea — average of yields on 3-year corporate bonds guaranteed by local banks.

Mexico — average of yields of six outstanding Telefonos de Mexico bonds.

Netherlands — CBS average yield on three 6% to 6.5% corporate bonds.

Norway — 5.75% Dalen Portland-Cement bond of 1969-1984.

Spain — average yield for a selected group of electricity companies.

Sweden — Central Satistical Bureau average yield on industrial bonds.

Switzerland — average yield on outstanding bonds of four leading Swiss companies.

United Kingdom — F.T. (Financial Times) Actuaries 20-year debentures and loans until February 1981. New series as of March 1981, F.T. Actuaries 25-year debentures and loans.

United States — Salomon Brothers index of new issue yields for Aa industrial bonds with five-year call protection.

Venezuela — average of yields on 15-year bond issues of Electricidad de Caracas.

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World Financial Markets

Morgan Guaranty Trust Company of New York

August 1981

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Industrial country prospects

Restrictive policies, especially high interest rates, are producing an economic slowdown in the major industrial countries this summer. Recovery probably will not start until year-end, and it could be mid-1982 before actual growth exceeds the growth of productive potential, i.e., labor force growth and underlying productivity improvement. Industrial-country real GNP growth this year is likely to be virtually unchanged from last year's 1.3%, but it could increase to approximately 2.8% in 1982. Unemployment, currently exceeding 24 million in the industrialized world, or more than 7% of the labor force, may not peak until well into 1982, and a significant decline may be twelve months or more away.

One reason for the current sluggishness is the worsening of the terms of trade, especially because of higher oil prices. The deflationary impact of the rapid increase of OPEC oil prices in 1979-80 is wearing off, but the rise in the dollar associated in part with exceptionally high interest rates in the United States has caused a general worsening of the terms of trade in Europe, and to some extent in Japan. Although dollar oil prices have softened in recent months and non-oil commodity prices have sagged, their prices in European currency terms have risen 35%-50% and 7%-16%, respectively, since October 1980 (see Table 1). For the European economies, this spin-off from dollar appreciation is imposing almost as large a cut in real incomes as did the 1979-80 oil shock, and is being dubbed the "third oil price shock."

Another reason for the current setback in economic activity is monetary restraint. High interest rates in Europe are partly a response to the U.S. lead, given European desires to limit the depreciation of their currencies. High rates also result from the need to finance both current account and budgetary deficits, as well as the need to contain labor cost inflation.

The degree of monetary restraint in the United States and elsewhere is illustrated in the charts showing real money supply growth and real interest rates. Real money supply growth has been negative in many countries, and even where positive it has been well below economic growth potential. Only in the United Kingdom has there been noticeable real money supply growth in recent months, but this is probably attributable to the civil service strike.

Table 1

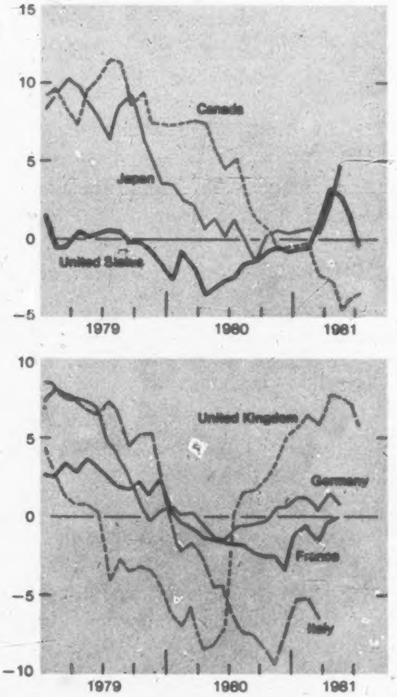
Oil and other commodity prices
% change in local currency terms

	Dec 78 to Oct 80		Oct 80 to mid-Aug 81	
	Oil[1]	Commodities[2]	Oil[1]	Commodities[2]
United States	153	44	5	—17
Japan	169	54	15	—10
France	149	42	46	15
Germany	148	41	40	10
Italy	163	49	48	16
United Kingdom	108	18	36	7

[1] Average effective OPEC oil prices.
[2] Non-oil commodity prices.
Source: The Economist, "All items index".

Real money supply

year-over-year percent change in broadly defined money supply deflated by consumer prices



Real short-term interest rates, excluding the effects of taxes, have been especially high this year in North America and Germany, and recently moved up sharply in France and the United Kingdom. Even in Japan, where nominal rates are among the lowest, real rates have remained positive. Italy is the exception among major industrial nations, with negative real rates for most of this year.

The U.S. lead in enforcing tough monetary policy springs from the Federal Reserve's setting of monetary growth targets well below the growth of nominal GNP. Both the Fed and the administration are willing to accept a weaker economy in order to bring down inflation. Federal Reserve Board Chairman Paul Volcker, while noting the recent deceleration of U.S. inflation into single figures, has stressed that this partly reflects temporary influences and that wage costs have yet to moderate much. In announcing the target ranges for money supply growth in 1982, which will be reduced for M1-B, Mr. Volcker drew attention to the crucial wage negotiations scheduled for next year. The combination of a sluggish economy and lower inflation could make monetary restraint consistent with a decline of several percentage points in short-term interest rates over the next twelve months. Renewed economic growth and a wider budget deficit, however, will probably keep rates high in real terms.

Continued high interest rates in the United States limit the scope for monetary easing elsewhere, at least until there are major shifts in current account positions, which may not happen until well into 1982. Moreover, in most countries, monetary conditions cannot be expected to ease rapidly while fighting inflation remains a top policy priority.

Fiscal policy trends are less uniformly restrictive among the industrial countries. Japan and the United Kingdom are narrowing government deficits, and in the process have dampened domestic demand. Efforts to reduce budget deficits in many other countries, however, have been frustrated by lower tax receipts and by higher expenditures on unemployment relief and on subsidies for business, all related to recession. The wider government deficits in continental European countries may have helped cushion the recession.

In Japan, the government deficit for the fiscal year ended last March was reduced slightly in relation to GNP. This year a combination of higher taxes and expenditure restraint is expected to reduce the deficit by a further 1.2% of GNP to 4.7%. There already are signs that another austere budget is being planned for fiscal 1982.

Britain, which launched deflationary monetary policies in mid-1979 before most other countries, switched last March to restraining the budget deficit while lowering interest rates and later accepting a fall in the exchange rate. The civil service strike depressed tax receipts in the second quarter, swelling the government deficit and the money supply. This effect is expected to be offset now that the strike is settled. The United Kingdom will try to stick to its medium-term strategy for further reducing the public-sector borrowing requirement, although extremely high and still rising unemployment makes it doubtful the government will be able to carry out major spending cuts next year.

In the United States, fiscal policy is becoming expansionary. Aided by buoyant economic activity and tax receipts, the federal budget deficit dipped to a $46 billion annual rate in the first half of 1981. The nonmilitary spending cuts that are the restraining feature of the adminis-

Real interest rates

in percent per annum
3-month money market rates deflated by consumer prices over previous 12 months

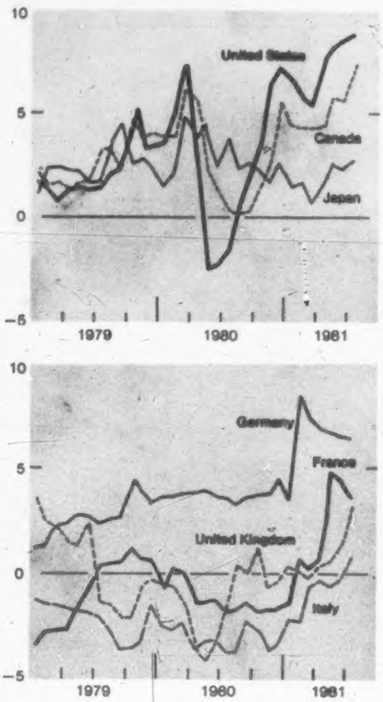


Table 2

Real GNP and industrial production

% change from previous peak to latest level

	Real GNP	*Industrial production*
United States	0.3	0.3
Canada	1.5	0.4
Japan	3.2[a]	—0.6
France	—1.8	—10.1
Germany	—1.9	—6.2
Italy	—1.3	—10.4
United Kingdom	—3.9	—14.6

[a] Japan's real GNP has not peaked. Calculation made from first quarter 1980.

tration's fiscal policy already are having some effect, but rapid military spending growth, business tax relief, and personal income tax cuts are likely to swell the deficit from now on, as will the economic slowdown. From an expected $56 billion total in fiscal 1981 (ending September 30), it could grow to as much as $70 billion, or more than 2% of GNP, in fiscal 1982. The annual rate during the last half of 1982 will be higher still, without new spending cuts. With fiscal policy on a collision course with monetary restraint, the pressures on financial markets promise to remain intense.

In Germany, as in the United States, heavy reliance has been placed on monetary restraint in the fight against inflation. The government deficit has been growing, partly because of the recession. Now spending restraint is being initiated in hopes of trimming next year's federal budget deficit to 1.6% of GDP from the 2.3% expected this year. In combination with an improving current account deficit, this should make possible progressive reduction of interest rates during the year ahead.

In France, the administration of former President Giscard d'Estaing launched a massive pre-electoral fiscal expansion. The budget deficit soared to FF58 billion in the first half of 1981 compared with FF32 billion in all of 1980. Money supply grew at an 18% annual rate in January-May, compared with the 10% target and 1980's 9.7% rate. The new Mitterrand administration has taken further expansionary steps, so that the deficit is unlikely to stay within the targeted FF70 billion for all of 1981. Next year a deficit of FF100 billion is expected. Monetary expansion probably will continue to exceed the target.

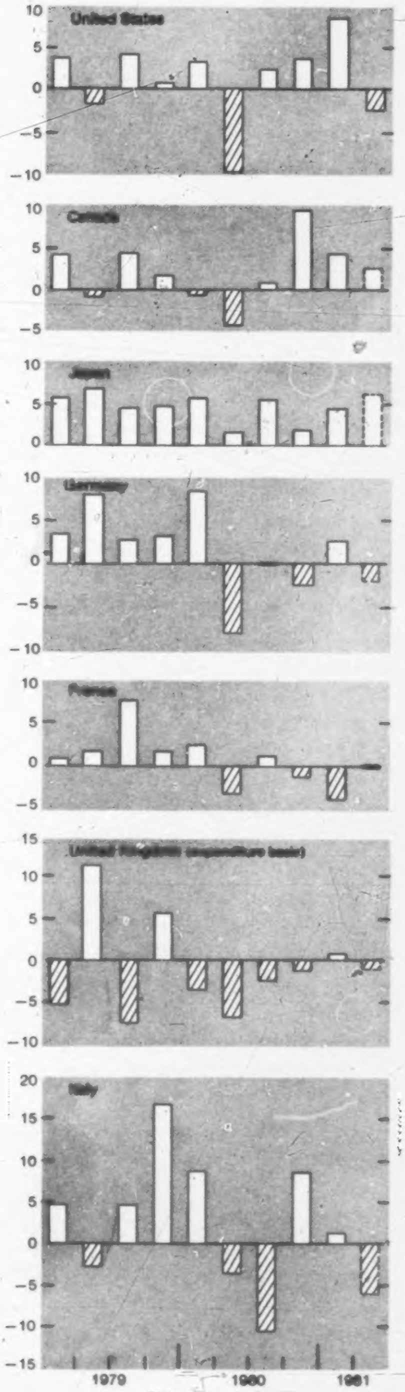
Italy's fiscal deficit is climbing from last year's 7.8% of GDP to over 10% this year and probably near 11% in 1982. Increasingly effective tax collection is more than matched by the spending propensity of the sprawling public administration. The recession also is swelling the deficit. Credit growth, which overshot last year's target, substantially breached the ceiling for the three months to March, largely because of excessive government borrowing. The 30% deposit requirement for imports from May 28 to October 1 is draining liquidity temporarily. Without significant further measures, the policy stance will become lax again in the autumn on both fiscal and monetary fronts.

Delayed recovery

In the United States, real GNP fell at a 2.4% annual rate in the second quarter and probably will be flat in the third. Earlier, the economy had expanded at a 4.8% rate between the second quarter of 1980 and the first quarter of 1981, so that even now output is close to the prerecession peak of 1980's first quarter (see Table 2). As could be expected, recent weakness has been concentrated in the credit-sensitive economic sectors: housing, autos, inventories and, increasingly, business investment. However, healthy July personal income and retail sales growth, continued growth of employment, and still rising industrial output show that the economy has considerable resilience. Enhanced by the first round of tax cuts in the fourth quarter and the prospective real income benefits of decelerating inflation, the pace of economic advance in the coming winter and spring could about match the 2½%-3% growth rate of productive potential, even though exports may weaken. Following a larger tax cut next July, the second half of 1982 should see further acceleration of consumer spending,

Real GNP

quarter-to-quarter percent change seasonally adjusted annual rates



reinforced by a revival of housing and business investment.

Canada's pattern has been much like the United States, with a 4.4% annual growth rate in the three quarters to early 1981, but probably a slight further advance in the second quarter. Industrial production is now leveling out, however, and could dip this summer. Record interest rates and the squeeze on real incomes from rising inflation are slowing housing and consume spending. Canada's recovery in 1982, dependent on exports and a revival of business investment, could be more modest than in the United States.

Japan's economic growth mostly has come from exports. Real GNP advanced at a 4.1% annual rate in the first quarter of 1981 and may have risen by 5½% or more in the second quarter. However, apart from a first-quarter surge in public-sector investment, domestic demand remains very subdued. Consumer spending shows only tentative signs of recovery, inventory accumulation still is weak, and business investment is losing steam. Industrial production fell at a 2% rate in the second quarter and may well remain weak in the third. Falling inflation should strengthen real incomes and consumer spending later this year, and price competitiveness will favor exports. Real GNP growth could be 4½%-5% through the first half of 1982 and accelerate in the second half, with stronger business investment outweighing cutbacks in government spending.

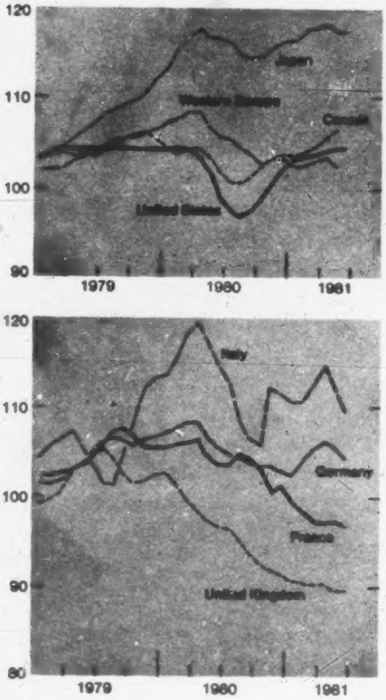
The recession in Europe, which started in mid-1979 in the United Kingdom and in the second quarter of 1980 on the continent, paused last winter, except in France; slight gains in real GDP were recorded in Germany and Italy. However, output is now declining again.

In Germany, the 2.7% annual rate of growth of first-quarter real GDP gave way to a small decline in the second quarter, with a further decline likely in the third. Industrial production fell at a 3.6% annual rate in the second quarter and June's level was 6% below the early-1980 peak. Consumer spending is down despite some early-1981 tax relief, business investment is depressed, and construction is hit by cuts in public works and low private housing demand. Inventories are beginning to be shaved. Apart from public consumption growth the bright spot is exports, where orders in April-June were up 16% in real terms from last summer's low, and deliveries have started to respond. As with Japan, both market growth and price competitiveness should ensure further export expansion in 1982. Inventories and consumer spending could become positive forces late this year, and a turnaround in housing and business investment during 1982 could lead to a fourth quarter-to-fourth quarter real GDP growth rate of 4%, with a year-on-year 2½% gain following 1981's expected 1% fall.

French real GDP fell at a 4% annual rate in the first quarter after a mild decline in the last three quarters of 1980. GDP may have leveled out in the second quarter. Industrial production was virtually flat, although still about 10% below its summer-1979 peak. Inventories, heavily reduced in the first quarter, are again being cut back because of high interest rates and weak final demand. Down, too, is private business investment, which is also hurt by political factors. Moreover, exports are stagnant. By contrast, government consumption is being boosted strongly, as are government investment projects, while personal incomes are being stimulated to aid consumer spending. A flat third quarter overall is likely to

Industrial production

3-month moving averages
1978=100



be followed by growth from the fourth quarter on, especially if depreciation of the franc against the German mark permits lower interest rates as well as faster export growth. Although private investment probably will remain hesitant for much of 1982, the magnitude of the consumption stimulus, together with growth in inventories and exports, could lead to 5% real GDP growth from fourth quarter-to-fourth quarter, with 3½% for the full year over 1981, after a 1% fall expected this year.

In the United Kingdom, real GDP was flat in the first half of 1981, but industrial production continued to decline, at a 2.8% annual rate between the first and second quarters despite a June upturn. The second quarter level was nearly 15% below the mid-1979 peak. The combination of higher taxes, a lower exchange rate, and decelerating wages is reducing real incomes and consumer spending, offset by a reduced rate of inventory liquidation. As exports and business investment are also weak, overall stagnation could continue in the present quarter. In 1982 exports and consumer spending should turn around, and inventory rebuilding should begin. A recovery of business investment could help produce a real GDP growth rate during 1982 of 3% from fourth quarter-to-fourth quarter, with 2% for the full year over 1981, when a decline of 1% is expected.

Italy's output has followed the German pattern, only with greater volatility. A 7% annual rate of real GDP recession in the second and third quarters of 1980 was followed by a nearly 5% rate of recovery in the next two quarters. In the second quarter of 1981, industrial production fell at a 9.8% rate, and GDP probably dropped, although less rapidly. A further reduction of output is likely in the third quarter before recovery starts toward year-end, provided an EMS realignment gives a badly needed boost to Italian competitiveness in exports and tourism. Apart from government consumption, all components of domestic demand are falling this summer. The recovery, when it comes, is likely to be limited by a continued fall in business investment and only modest growth in consumer spending and inventories. Growth of real GDP during 1982 could be 3% from fourth quarter-to-fourth quarter and 2% year-on-year, after an expected 1% fall in 1981.

Implications for current accounts, inflation, and unemployment

Growth rate differentials tend to have a much greater influence on current account developments in the short run than do relative price changes. Thus, even though the past year's exchange rate realignment is helping to narrow current account imbalances among the major industrial countries, dramatic shifts are unlikely during the next two or three quarters while economic growth prospects remain generally subdued. Despite the dollar's 14% real appreciation since the end of 1980, the U.S. current account, in surplus at a $7 billion annual rate in the first half of this year, still could be close to equilibrium in the first half of 1982. Japan's current account moved into small surplus in the first half of 1981, but further gains may come more slowly. Britain's large surplus at the beginning of this year may already have diminished considerably, but only a modest deficit is probable in 1982. Sluggish growth in industrial-country markets could delay major improvement in Germany's large deficit until the first half of 1982. France could run counter to the general pattern of narrowing payments imbalances. A sharp economic downturn earlier this year

Table 3

Recent trends in oil consumption in major industrial countries

% change from previous year

	1980	*1981 estimated year to date*
United States	—8.2	—5.2 (Jan-July)
Canada	—2.8	—5.9 (Jan-May)
Japan	—9.1	—7.0 (Jan-Apr)
France	—8.1	—12.9 (Jan-May)
Germany	—10.8	—15.2 (Jan-June)
Italy	—2.2	0.2 (Jan-May)
United Kingdom	—14.8	—11.5 (Jan-June)

Table 4

Consumer prices

% change at annual rates

	Latest 3 months from:	
	year ago	*previous 3 months*
United States	9.9	8.4
Canada	12.7	13.4
Japan	4.6	4.0
France	13.1	14.4
Germany	6.0	8.5
Italy	20.4	16.5
United Kingdom	11.3	15.2

Table 5

Unemployment rates

as % of labor force
seasonally adjusted

	Annual average		*latest month*
	1979	*1980*	
United States	5.8	7.2	7.0
Canada	7.5	7.5	7.2
Japan	2.1	2.0	2.3
France	5.9	6.3	7.8
Germany	3.7	3.9	5.5
Italy	7.7	7.5	7.7
United Kingdom	5.4	6.8	10.9

narrowed the French deficit through the second quarter of 1981. However, as France leads recovery in Europe, the deficit may widen again.

Restrictive policies and slack labor and product markets are cooling inflation in the industrialized world. The decline in dollar prices of internationally traded commodities could persist into 1982. Inflation should especially benefit from stable oil prices over the next year. Oil consumption again fell substantially in the first half of this year (see Table 3). The largest declines were in Europe, where economic activity has been weakest and oil prices have risen the most. The anticipated economic upturn in North America and in Western Europe is unlikely to show much vigor until next winter's peak seasonal demand for oil is past. Moreover, any tendency for oil demand to rise because of increasing industrial output could be outweighed by the conservation and substitution induced by the rise in oil prices since the end of 1978. Thus, small reductions in oil consumption are probable in the second half of this year and perhaps again in 1982. The weak market demand outlook points to continuing softness in oil prices in the year ahead, especially given the recent failure of OPEC to agree on a unified price structure.

Despite the better world trend, inflation prospects differ markedly among the major countries. Inflation in the United States already has slowed. Consumer prices increased at only an 8.4% rate in the three months ended July 1981, and the GNP deflator rose at only a 6.6% rate in the second quarter. With inflationary expectations receding, there is a good chance that wage behavior also will moderate. Adjusted average hourly earnings in industry have risen at an annual rate of less than 8% since the beginning of this year versus a 9.3% increase in the twelve months to December 1980. Employees have agreed to wage concessions in a number of hard-pressed industries, and there are indications that profit squeezes in other industries may increase resistance to wage claims. Thus, inflation at about 7% through 1982, below the industrial-country average, is a good bet.

Canada has diverged sharply from the United States. Rising domestic energy prices, in belated adjustment to the world market, plus rapid wage increases and currency depreciation, have pushed consumer price inflation above 13% this year (see Table 4). With more energy price increases on the way and with wage costs advancing strongly, consumer prices could rise by at least 11%-12% over the next twelve months.

Japanese inflation has fallen below 5%, and is likely to remain between 4% and 5% through next year. Japan adjusted rapidly to higher oil prices, and with productivity growth now nearly equaling nominal wage increases in manufacturing, there is little upward pressure on prices.

Slowing of inflation in Europe will be delayed by the effects on import prices of dollar appreciation. When demand begins to recover, businesses will be trying to rebuild profit margins, which have been squeezed by recession. Some of this will be achieved through productivity gains — a promising prospect for Germany and, perhaps, the United Kingdom — as well as by raising prices. Germany stands a good chance next year of bringing consumer price inflation, which in recent months has been close to 6%, to within the same 4%-5% range foreseen in Japan. Britain's inflation has been adversely affected in recent months by higher taxes and sterling depreciation, but the deceleration of wage increases gives hope for renewed decline in inflation next year. If the government holds to existing policies, including its tough stance on public-sector wages, inflation might fall below the 10%-11% rate now expected for 1982.

The prospects for lower inflation in France and Italy are much less favorable. Wage increases are still running ahead of prices, resisting the reduction in real incomes implied by worsened terms of trade. Italian fiscal policy weakness and the expansionary thrust of French policy are inflationary. French policymakers have hinted at a return to price controls while trying to stimulate growth and redistribute incomes. In the absence of wide-ranging controls, consumer prices in France could increase by more than 13% in the year ahead, while the rate of increase in Italy could remain near 20%.

High inflation and efforts to reduce it have taken their toll on employment in many countries. Economic activity revived sufficiently in North America in the second half of 1980 and in early 1981 to bring about a small decline in the rate of unemployment, from 7.5% last summer to 7.0% and 7.2% in July 1981 for the United States and Canada, respectively. The current slowdown could push unemployment rates above 7.5% again by early 1982. In Western Europe, however, unemployment rates have risen sharply for the past year or more (see Table 5), and the prospect of delayed economic recovery followed by only moderate growth implies that unemployment could continue to climb well into next year.

European governments have taken selective measures to cushion the employment effects of recession by aiding certain depressed industries and by creating additional public-sector jobs. As noted earlier, these measures plus expenditures for general unemployment relief have been a major cause of widening budget deficits. Now France is shifting the thrust of its macro-economic policy toward stimulus to boost employment. In other countries, governments are coming under increasing pressure to ease restraint policies. Nowhere is this more evident than in the United Kingdom, where a doubling of the unemployment rate in the past two years and urban riots are prompting calls for change in the Thatcher government's policies. Even in the United States, some observers see potential conflict between Federal Reserve money supply targets and administration desires to get the economy growing more rapidly.

Most governments still are convinced that there is no acceptable alternative to continuing the fight against inflation as a precondition for restoring sustainable economic growth, even if it means more unemployment in the near term. For now, France is likely to remain the principal exception. However, the next year or so could severely test the resolve of others to stay on their present policy course, especially if recovery is delayed much beyond the end of this year.

The outlook for moderate recovery next year is predicated on a gradual lowering of interest rates and inflation. Continued high, or even higher, interest rates could jeopardize prospects for an economic upturn. Yet, a premature easing of monetary policies would not be conducive to a sustained recovery. Ill-timed steps to reflate demand would risk undoing the progress made in reducing inflation and lead to further entrenchment of inflationary expectations.

What is needed in many countries is a better mix of policies. Reductions in budget deficits would ease the burdens on monetary policy and promote better functioning of financial markets. This is as true of the United States as other industrial countries. While a start has been made in trimming government expenditure growth in the United States, it is hard to escape the conclusion that movement toward a balanced budget will require cuts in social security and defense programs, since these will comprise close to 31% and 25%, respectively, of total federal outlays in fiscal 1982. Wage moderation also is an essential ingredient to any effort to lower inflation. Wage increases far in excess of productivity improvements put an unacceptably high floor under inflation rates and, thus, interest rates.

Statistical appendix

for key to data in tables see July 1981 issue of World Financial Markets.

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Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

Effective exchange rates

Index numbers, March 1973=100. The index of the effective exchange rate for a currency is a measure of that currency's trade-weighted average appreciation or depreciation vis-à-vis the currencies of 15 other major countries. The exchange rates used in the construction of this index are the averages of daily noon spot exchange rates in New York for months and for weeks ending on dates shown. The trade weights used are based on 1976 bilateral trade in manufactures.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
pre-June 1970 parities	118.5	94.9	79.3	116.2	91.6	97.5	110.9	95.9	98.2	88.3	97.8	97.9	98.1	102.2	92.2	98.4
Smithsonian central rates	107.0	101.3	88.7	116.0	95.4	96.1	108.3	97.0	99.1	91.6	98.0	96.0	96.3	100.5	91.7	98.1
1980																
July	96.0	84.8	111.7	79.3	138.2	91.1	52.7	110.9	119.1	165.5	122.2	92.5	102.8	87.8	75.1	70.0
August	97.2	84.5	111.1	80.5	137.2	90.7	52.7	110.2	119.0	163.8	122.0	91.8	103.3	88.2	75.7	69.6
September	96.4	83.9	115.8	81.4	137.0	90.4	52.4	109.9	119.1	164.7	121.8	91.4	103.3	88.2	75.4	68.4
October	96.8	83.6	119.4	83.2	135.4	89.9	52.0	109.1	118.3	165.5	121.0	90.5	103.2	88.7	75.4	68.3
November	98.9	82.7	118.8	84.9	134.3	89.0	51.7	108.3	117.7	164.5	119.9	89.5	103.6	89.0	76.1	68.6
December	99.9	82.2	122.0	84.8	133.9	88.7	51.4	107.8	117.0	162.5	119.8	89.4	102.6	88.9	76.6	67.5
1981																
January	99.4	82.5	126.7	87.8	132.8	88.3	51.0	107.2	116.2	160.9	119.4	88.0	101.7	88.8	76.6	66.8
February	102.3	82.5	127.3	87.7	131.7	87.1	50.3	106.3	115.0	159.1	118.8	86.4	103.1	90.2	77.4	65.9
March	102.5	83.1	125.4	85.1	134.0	87.0	49.6	106.1	114.8	160.5	119.8	86.2	103.7	90.1	78.1	65.8
April	104.2	83.5	123.0	84.8	133.8	86.7	48.6	106.2	114.4	160.3	120.1	85.7	104.6	90.5	79.0	65.8
May	107.3	83.4	122.2	84.8	132.6	84.8	48.3	106.3	113.3	160.8	119.5	84.7	105.7	90.9	80.3	66.2
June	109.3	83.6	121.9	82.1	131.9	85.0	47.9	105.8	113.1	165.6	119.0	84.6	104.6	91.1	82.1	65.6
July	111.6	83.6	118.8	79.5	131.6	85.0	47.9	105.6	113.1	167.9	119.4	85.0	104.3	91.2	84.4	65.1
3	110.0	84.0	120.8	80.0	131.8	85.0	48.0	105.6	113.3	168.7	119.3	85.0	103.9	91.3	83.5	65.3
10	111.1	84.0	120.5	80.2	131.2	84.7	47.9	105.4	113.0	168.4	119.1	84.6	104.3	91.3	84.0	65.1
17	110.8	84.1	119.4	79.3	131.9	85.2	47.8	105.6	113.2	168.7	119.2	85.0	104.0	91.1	84.1	65.2
24	112.0	83.4	118.0	79.0	131.5	85.1	48.0	105.7	113.2	168.2	119.5	85.2	104.3	91.0	84.6	64.9
31	113.0	82.6	116.3	79.1	131.6	85.0	48.1	105.6	113.5	166.7	119.9	85.1	104.6	91.2	84.9	65.0
August 7	115.1	81.9	115.9	78.4	131.2	84.4	48.1	105.4	113.2	165.7	119.8	84.5	105.5	91.4	85.5	65.1
14	114.2	82.5	119.9	78.2	130.9	83.8	48.1	105.5	113.4	167.2	119.2	84.3	105.3	91.2	85.3	64.3
21	112.1	83.5	121.2	79.1	131.4	84.2	47.7	106.3	113.1	165.5	119.5	84.7	104.8	91.0	84.8	64.4

Real effective exchange rates

Index numbers, March 1973=100. The index of the real effective exchange rate is the index of the effective exchange rate adjusted for inflation differentials which are measured by wholesale prices of nonfood manufactures. Exchange rates and trade weights used in the construction of this index are the same as those used for effective exchange rate indices. Annual figures are averages of months.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
1977	100.9	99.2	93.3	101.7	102.8	96.6	92.4	99.0	104.2	105.6	109.6	97.3	99.0	105.3	91.8	101.3
1978	96.4	92.1	107.0	106.5	103.5	97.4	90.8	98.6	104.1	122.4	109.7	103.6	94.7	96.8	87.0	97.2
1979	96.5	92.2	95.7	118.9	104.3	99.4	90.7	96.0	100.7	115.7	108.5	101.5	89.6	99.6	85.9	109.3
1980	98.3	91.3	93.5	138.5	101.3	101.2	93.1	90.6	97.5	105.6	109.2	94.1	91.6	101.1	87.4	103.5
1980																
August	97.5	91.3	94.5	140.9	100.8	102.7	92.9	89.9	97.6	104.4	110.0	95.3	90.9	100.9	88.2	101.7
September	96.1	91.3	98.4	142.6	100.4	102.5	93.4	89.5	97.4	104.7	109.7	93.8	91.8	101.3	88.2	100.7
October	97.8	90.8	99.5	145.1	99.4	101.9	92.9	88.5	96.2	104.9	108.5	93.7	92.3	101.5	88.0	100.5
November	99.9	89.9	98.2	147.5	98.9	100.3	93.3	88.3	95.1	104.7	107.1	92.5	93.0	101.8	89.0	101.1
December	100.9	89.3	99.9	146.6	98.2	101.5	93.0	87.5	94.2	103.2	107.5	92.7	92.2	101.7	89.8	100.2
1981																
January	100.8	90.2	102.2	152.5	96.9	99.9	93.7	86.3	95.5	101.2	107.8	89.6	92.4	102.3	89.6	100.2
February	104.5	89.5	101.0	152.0	95.6	99.8	92.5	85.9	94.0	100.2	106.7	88.0	94.5	104.0	91.0	98.4
March	104.9	90.0	98.2	146.9	97.2	99.8	92.3	85.3	93.5	101.1	107.4	89.0	95.8	104.1	91.9	99.4
April	107.3	89.9	95.5	147.1	96.8	100.0	91.3	84.7	93.2	99.9	107.7	89.5	96.8	103.6	92.7	99.5
May	109.9	90.9	94.8	146.6	95.7	98.0	91.7	84.3	92.6	99.9	106.5	88.6	97.6	104.6	94.0	99.8
June	111.8	91.4	94.1	142.3	95.0	98.5	91.2	83.8	92.6	102.7	105.7	89.3	96.4	104.4	96.6	98.4
July	114.9	90.8	90.5	137.0	94.5	99.4	92.2	83.0	92.6	103.6	105.9	90.7	96.6	104.2	99.2	98.2

Euro-currency market size

based on foreign-currency liabilities and claims of banks in major European countries, the Bahamas, Bahrain, Cayman Islands, Panama, Canada, Japan, Hong Kong, and Singapore
billions of dollars (rounded to nearest $5 billion), at end of period

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981 Marr
Estimated size											
Gross	150	205	310	390	480	590	725	930	1 190	1 470	1 520
Liabilities to nonbanks	30	35	55	75	80	100	125	170	230	270	310
Liabilities to central banks	15	25	40	60	70	85	110	115	165	190	185
Liabilities to other banks[a]	105	145	215	255	330	405	490	645	795	1 010	1 025
Net	85	110	160	215	250	310	380	485	600	735	750
Claims on nonbanks	35	45	65	100	115	150	195	245	295	365	375
Claims on central banks and on banks outside market area[b]	35	45	75	95	115	135	155	195	245	295	300
Conversions of Euro funds into domestic currencies by banks in market area[c]	15	20	20	20	20	25	30	45	60	75	75
Euro-dollars as % of gross liabilities in all Euro-currencies	76	78	73	77	78	79	76	74	72	76	77

a includes unallocated liabilities
b includes unallocated claims
c in European market area only
r revised
p preliminary

Euro-currency deposit rates

prime banks' bid rates in London, at or near end of month

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Euro-dollar:											
overnight	7.12	10.62	14.00	19.25	17.50	15.75	15.00	17.17	17.62	19.12	19.50
7-day fixed	6.31	10.62	14.00	19.75	17.50	15.50	14.37	16.00	17.50	18.50	18.50
one month	6.87	11.00	14.37	19.12	17.68	16.81	14.81	17.75	17.87	18.12	18.68
three months	7.19	11.69	14.44	17.62	17.50	16.62	14.81	16.87	17.75	17.81	18.68
six months	7.50	12.31	14.44	16.75	16.75	16.75	14.81	17.00	16.94	17.25	18.68
twelve months	7.67	12.00	12.87	14.87	15.75	16.06	14.81	16.31	16.12	16.31	17.62
Euro-mark:											
one month	2.19	3.19	8.50	8.87	9.31	14.87	12.31	12.12	12.25	12.25	12.06
three months	2.50	3.31	8.56	8.87	9.37	14.25	12.31	12.44	12.68	12.37	12.44
six months	2.81	3.69	8.56	8.87	9.37	13.37	12.00	12.44	12.68	12.37	12.56
twelve months	3.06	3.81	8.12	8.93	9.31	12.75	11.43	12.00	12.68	12.31	12.44
Euro-Swiss franc:											
one month	1.31	—.06	5.19	6.00	5.50	8.37	7.50	9.50	9.62	9.37	8.56
three months	1.37	0.00	5.75	6.00	6.00	8.37	7.62	9.50	10.00	9.87	9.25
six months	1.87	0.12	5.87	5.75	6.00	8.37	7.62	9.50	10.12	9.87	9.62
twelve months	2.25	0.62	5.56	5.50	6.12	7.62	7.62	9.50	9.37	9.12	9.06
Euro-sterling:											
one month	6.50	12.00	16.75	14.75	14.25	13.75	12.50	12.37	11.87	11.81	14.25
three months	6.62	12.62	16.75	14.75	13.75	12.75	12.50	12.37	12.37	12.50	14.62
six months	7.12	13.25	16.75	14.25	13.12	12.12	12.37	12.37	12.75	12.81	14.62
twelve months	7.37	13.00	15.25	14.00	13.12	12.00	12.18	12.37	12.87	13.12	14.50
Euro-French franc:											
one month	12.25	10.50	13.87	11.12	10.37	11.75	12.00	13.12	22.50	26.00	21.50
three months	13.25	9.87	14.00	11.75	10.87	12.87	12.37	13.50	19.50	23.00	21.50
six months	14.00	9.87	14.12	12.25	11.87	13.00	12.50	13.62	18.50	21.00	21.25
twelve months	13.25	10.25	13.75	12.87	12.62	13.00	13.00	13.62	17.00	19.00	19.50
Euro-yen:											
one month	0.62	—.60	7.62	9.12	8.25	8.62	7.75	6.62	7.12	7.00	6.75
three months	1.81	0.62	8.31	9.25	8.50	8.62	7.62	7.37	7.75	7.50	7.12
six months	2.75	1.87	8.62	9.62	8.50	8.37	7.75	7.37	7.87	7.87	7.37
twelve months	3.25	2.19	7.94	9.37	8.50	8.37	7.81	7.37	8.25	7.87	7.87

Euro-currency bank credits

publicly-announced in period, in millions of dollars

	1978	1979	1980	1981			Jan-Aug	
				Jun	Jul[r]	Aug[p]	1981	1980
Industrial countries	**28 952**	**27 248**	**39 100**	**2 006**	**47 542**	**1 365**	**64 917**	**20 687**
Australia	212	941	2 475	196	—	—	367	603
Canada	5 705	1 845	1 743	—	3 300	—	3 640	656
Denmark	2 242	1 205	1 720	26	101	—	1 027	1 338
Finland	550	92	1 040	—	115	—	376	1 040
France	1 914	2 955	1 745	—	702	—	2 712	1 561
Greece	508	1 009	1 333	14	220	220	1 064	859
Ireland	616	687	237	88	90	—	552	111
Italy	2 485	3 708	6 268	533	120	620	4 151	4 367
Norway	1 517	935	685	71	260	—	427	410
Spain	2 426	4 184	5 457	270	60	78	2 491	2 717
Sweden	1 872	1 263	1 370	50	85	—	1 565	1 208
United Kingdom	3 898	795	1 470	—	122	—	392	1 098
United States	1 206	2 348	6 719	353	42 217	420	43 957	1 133
Other[a]	3 801	5 281	6 838	405	150	27	2 196	3 586
Developing countries	**37 290**	**47 964**	**35 054**	**4 791**	**3 379**	**2 813**	**27 842**	**21 665**
Non-OPEC countries	26 669	35 225	24 009	3 715	2 234	1 987	21 756	13 589
Argentina	1 461	2 965	2 506	140	—	545	1 517	1 620
Brazil	5 634	6 278	4 158	476	666	230	3 436	2 221
Chile	1 045	867	1 322	57	45	497	1 581	585
Korea	2 651	3 258	1 917	716	311	69	1 808	1 133
Malaysia	858	1 168	—	40	—	140	725	—
Mexico	7 250	8 243	5 971	897	616	249	5 839	3 441
Morocco	605	499	420	102	—	—	542	249
Peru	—	596	480	359	174	—	995	335
Philippines	2 073	2 067	1 056	262	—	100	824	476
Taiwan	254	1 063	314	53	—	—	601	64
Other[b]	4 838	8 221	5 865	613	422	157	3 888	3 465
OPEC countries	10 621	12 739	11 045	1 076	1 145	826	6 086	8 076
Algeria	2 576	1 906	40	—	—	—	—	40
Indonesia	1 118	1 061	1 435	7	—	—	305	859
Nigeria	825	1 373	1 330	320	442	—	1 304	538
United Arab Emirates	726	401	101	—	55	300	363	59
Venezuela	2 054	6 830	6 715	749	348	466	3 223	5 304
Other	3 322	1 168	1 424	—	300	60	891	1 276
Communist countries	**3 767**	**7 325**	**2 809**	**152**	**99**	**80**	**1 291**	**1 840**
China	—	3 395	181	—	50	—	50	139
East Germany	642	796	303	100	—	—	400	76
Hungary	700	260	550	—	—	—	550	249
Poland	374	849	800	—	—	—	—	799
Other[c]	2 051	2 025	975	52	49	80	291	577
International organizations	**160**	**275**	**429**	—	—	—	**70**	**409**
TOTAL	**70 169**	**82 812**	**77 392**	**6 949**	**51 020**	**4 258**	**94 120**	**44 601**

a includes multi-national organizations b includes regional development organizations c includes COMECON institutions p preliminary
r revised

International bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
U.S. companies:											
U.S. dollar	7.95	8.55	10.13	11.76	11.94	12.17	12.46	12.51	12.64	12.32	12.67
Swiss franc	5.31	5.70	6.61	7.27	7.44	7.26	7.42	7.46	7.55	7.31	7.36
European companies:											
U.S. dollar	8.42	9.21	10.93	12.42	12.53	13.06	12.94	12.99	13.81	13.85	13.99
German mark	6.80	6.84	7.55	8.79	8.85	9.58	9.16	9.18	9.71	9.71	9.83
Governments:											
U.S. dollar	8.42	9.12	10.66	11.83	11.93	12.37	12.37	12.43	12.92	12.70	12.89

New international bond issues

new issues in period, in millions of dollars

	1978	1979	1980	1981			Jan-Aug	
				Jun	Jul r	Aug p	1981	1980
By type:								
Euro-bonds, total	**14 125**	**18 726**	**23 970**	**3 612**	**2 535**	**1 907**	**17 119**	**15 908**
by category of borrower								
U.S. companies	1 122	2 872	4 107	800	477	455	3 482	2 373
Foreign companies	4 540	7 183	9 032	1 291	1 428	662	6 969	5 819
State enterprises	3 291	4 524	5 839	657	305	477	3 766	4 068
Governments	3 643	2 433	3 045	218	325	23	1 272	2 212
International organizations	1 529	1 714	1 947	646	—	290	1 630	1 436
by currency of denomination								
U.S. dollar	7 290	12 565	16 427	3 370	2 367	1 700	14 631	10 784
German mark	5 251	3 626	3 607	32	33	16	246	2 582
Dutch guilder	394	531	1 043	57	—	—	364	750
Canadian dollar	—	425	279	42	—	—	42	257
European unit of account	165	253	65	43	42	—	117	25
Other	1 025	1 326	2 549	68	93	191	1 719	1 510
Foreign bonds outside the United States, total	**14 359**	**17 749**	**14 521**	**921**	**1 403**	**741**	**8 172**	**9 444**
by category of borrower								
U.S. companies	245	217	307	49	11	23	304	219
Foreign companies	2 110	3 463	3 157	215	568	364	2 438	1 757
State enterprises	3 163	3 284	2 830	246	366	115	2 239	1 693
Governments	5 771	7 663	4 086	226	135	114	1 325	3 079
International organizations	3 070	3 122	4 141	185	323	125	1 866	2 696
by currency of denomination								
German mark	3 789	5 379	4 839	42	144	39	642	3 705
Swiss franc	5 698	9 777	7 617	568	902	464	5 076	4 751
Dutch guilder	385	75	259	23	74	—	253	107
Japanese yen	3 826	1 833	1 088	269	217	215	1 566	502
Other	671	685	718	19	66	23	635	379
Foreign bonds in the United States, total	**5 795**	**4 515**	**3 429**	**985**	**746**	**100**	**4 121**	**1 729**
by category of borrower								
Canadian entities	3 142	2 193	2 136	825	550	100	3 106	870
International organizations	459	1 100	550	—	—	—	—	350
Other	2 194	1 222	743	160	196	—	1 015	509
By country of borrower:								
Industrial countries	**24 964**	**31 886**	**32 732**	**4 057**	**3 911**	**2 135**	**23 284**	**21 205**
Australia	1 218	593	539	89	130	—	345	324
Austria	1 027	1 218	1 859	144	211	86	944	1 243
Canada	4 764	4 197	3 797	1 182	1 045	504	5 666	2 211
Denmark	1 017	752	1 125	41	247	—	461	867
Finland	952	899	392	138	—	—	354	316
France	1 286	2 106	2 820	506	273	100	2 236	1 641
Japan	3 467	5 775	5 309	599	558	737	4 173	2 977
Netherlands	250	832	1 585	43	69	46	300	1 166
Norway	2 751	1 954	892	69	32	—	221	577
Sweden	876	1 530	3 244	50	43	46	1 162	2 058
United Kingdom	1 365	1 181	1 733	25	250	—	609	1 219
United States	2 973	6 767	5 587	849	488	478	3 786	3 764
Developing countries	**4 227**	**3 093**	**2 485**	**630**	**450**	**198**	**2 602**	**1 329**
Non-OPEC countries	2 684	2 675	1 942	630	450	198	2 291	1 109
Brazil	843	930	349	—	14	—	60	292
Mexico	568	363	544	505	301	155	1 583	288
Philippines	170	175	70	—	—	—	30	—
OPEC countries	1 543	418	543	—	—	—	311	220
Algeria	721	208	—	—	—	—	—	—
Venezuela	588	55	398	—	—	—	221	120
Communist countries	**30**	**75**	**65**	—	—	—	**30**	**65**
Hungary	—	—	65	—	—	—	—	65
International organizations	**5 058**	**5 938**	**6 638**	**831**	**323**	**415**	**3 496**	**4 462**
TOTAL	**34 279**	**40 990**	**41 920**	**5 518**	**4 684**	**2 748**	**29 412**	**27 081**

Central bank discount rates

	1977	1978	1979	1980		1981		Current	
	end Dec	end Dec	end Dec	end Sep	end Dec	end Mar	end Jun	Aug 26 1981	effective since
United States	6.00	9.50	12.00	11.00	13.00	13.00	14.00	14.00	May 5, 81
Canada	7.50	10.75	14.00	11.20	17.36	16.69	19.08	21.03	Aug 20, 81
Japan	4.25	3.50	6.25	8.25	7.25	6.25	6.25	6.25	Mar 18, 81
United Kingdom	7.00	12.50	17.00	16.00	14.00	12.00	12.00	12.00*	Mar 11, 81
Belgium	9.00	6.00	10.50	12.00	12.00	16.00	13.00	13.00	May 29, 81
France	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	3.00	3.00	6.00	7.50	7.50	7.50	7.50	7.50	May 2, 80
Italy	11.50	10.50	15.00	16.50	16.50	19.00	19.00	19.00	Mar 23, 81
Netherlands	4.50	6.50	9.50	8.50	8.00	9.00	9.00	9.00	Mar 3, 81
Austria	5.50	4.50	3.75	6.75	6.75	6.75	6.75	6.75	Mar 21, 80
Denmark	9.00	8.00	11.00	12.00	11.00	11.00	11.00	11.00	Oct 27, 80
Finland	8.25	7.25	8.50	9.25	9.25	9.25	9.25	9.25	Feb 1, 80
Ireland	6.75	11.85	16.40	13.50	12.75	12.75	14.40	15.00	Jul 10, 81
Norway	6.00	7.00	9.00	9.00	9.00	9.00	9.00	9.00	Nov 30, 79
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	Jul 26, 77
Sweden	8.00	6.50	9.00	10.00	10.00	12.00	12.00	12.00	Jan 20, 81
Switzerland	1.50	1.00	2.00	3.00	3.00	4.00	5.00	5.00	May 11, 81
Argentina	165.27	108.19	89.90	69.64	87.01	109.34	143.39	143.39	Jun 19, 81
Korea	14.00	14.50	14.50	17.50	15.50	15.50	15.50	15.50	Nov 11, 80
New Zealand	10.00	10.50	13.00	14.00	14.00	14.00	14.00	14.00	Jul, 80
Philippines	6.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	May 19, 78
Singapore	3.50	4.50	6.75	8.75	10.50	11.00	10.00	10.75	Jul 10, 81
South Africa	9.00	8.50	7.00	7.00	7.00	8.00	10.50	12.50	Jul 21, 81
Venezuela	7.00	7.50	11.00	10.00	13.00	13.00	12.00	12.00	Apr 25, 81

*Announcement of minimum lending rate (MLR) discontinued August 20, 1981.

Day-to-day money rates

monthly averages

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
United States	6.56	10.03	13.78	18.90	19.08	15.93	14.70	15.50	18.52	19.01	19.02
Canada	6.84	9.44	13.83	15.61	16.93	16.58	16.90	16.79	17.17	18.69	18.85
Japan	5.01	4.57	8.02	9.49	8.91	8.60	8.04	7.19	7.06	7.12	7.25
Australia	9.96	8.40	7.84	9.51	9.69	10.35	11.11	11.83	12.07	13.04	13.44
United Kingdom	4.81	10.00	14.87	13.00	12.19	12.19	11.06	10.15	9.95	9.62	10.63
Belgium	7.48	6.73	10.65	9.66	10.32	9.18	10.13	16.51	13.00	9.58	11.07
France	9.30	6.67	12.17	10.87	10.73	10.91	11.72	12.23	16.03	19.93	18.49
Germany	3.24	3.61	9.15	9.13	9.13	10.57	11.25	11.27	11.79	11.93	12.00
Italy	11.37	11.00	16.00	17.50	17.37	17.37	19.62	19.62	19.75	20.00	20.00
Netherlands	5.27	10.00	15.67	8.37	8.95	9.12	9.75	9.50	10.88	11.13	12.50
Austria	9.25	5.37	8.50	11.50	9.50	9.00	11.00	12.00	9.00	12.25	12.00
Finland	22.99	9.29	13.53	12.50	12.50	12.50	11.72	10.57	11.00	11.00	11.00
Ireland	8.00	12.12	16.88	13.31	13.44	13.38	13.12	15.38	14.12	13.81	15.50
Spain	7.22	16.75	9.61	16.74	15.89	12.50	11.98	13.89	16.80	18.53	16.68
Sweden	8.91	6.28	11.99	11.41	12.75	16.97	15.40	14.20	14.96	14.58	13.54
Switzerland	0.85	0.00	1.25	5.75	3.75	3.50	4.50	5.00	3.62	3.00	2.37
Argentina	n.a.	n.a.	78.22	70.84	74.81	92.07	133.08	96.66	108.76	131.19	130.32
Brazil	28.44	35.64	32.28	49.68	51.80	54.48	56.64	49.32	65.16	54.12	60.36
Hong Kong	4.87	9.67	14.19	14.05	14.18	18.00	16.85	16.43	16.67	16.12	16.64
Korea	14.40	15.00	15.00	14.82	14.82	14.82	14.82	14.82	14.82	14.82	14.82
Philippines	14.44	13.22	16.25	15.70	13.66	14.43	17.34	15.59	16.61	16.12	11.58
Singapore	3.59	4.98	10.17	10.23	11.77	12.73	9.73	6.76	7.92	13.08	15.38
South Africa	7.65	7.11	3.81	5.80	6.22	7.06	7.26	7.49	8.51	8.78	10.06
Euro-dollars	6.94	10.80	14.41	19.22	19.05	16.14	14.57	16.36	18.19	18.75	19.13

Treasury bill rates

bond-equivalent yields, at or near end of month

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
United States	6.33	9.42	12.39	14.87	15.83	14.80	13.55	15.51	16.00	14.75	15.51
Canada	7.17	10.46	13.66	17.01	16.86	16.83	16.44	17.35	18.43	18.83	20.29
Japan	4.15	3.39	5.68	5.93	5.93	5.93	5.93	5.68	5.68	5.68	5.68
Australia	8.35	8.35	9.31	12.17	12.42	12.68	12.72	13.78	13.22	13.32	13.99
United Kingdom	6.42	12.01	16.45	13.45	13.02	11.93	11.87	11.57	11.78	12.24	14.31
Belgium	9.25	9.25	14.40	12.75	12.10	13.25	15.00	17.00	16.75	15.00	16.25
Ireland	6.74	11.83	16.37	12.84	12.83	12.84	12.70	13.85	14.65	14.72	15.42
Italy	12.81	12.81	15.62	17.02	17.02	17.02	19.01	18.99	19.66	21.36	21.36
Netherlands	6.00	9.50	12.75	8.00	8.75	8.75	9.25	9.75	11.75	12.00	15.25
Spain	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13.25	17.00	17.00	16.00
Sweden	9.21	5.84	9.74	12.87	16.85	16.85	15.73	15.73	15.77	13.97	12.79
Argentina	109.06	82.55	71.04	66.19	69.10	90.06	107.97	86.79	104.34	121.03	122.48
Brazil	38.08	41.21	27.84	76.84	78.24	73.58	70.46	71.33	71.88	72.98	72.64
Korea	16.88	17.01	19.53	16.35	18.98	18.98	18.98	18.98	18.16	16.00	16.00
Mexico	n.a.	12.75	17.89	27.73	28.87	28.76	28.55	28.36	28.08	28.34	n.a.
New Zealand	7.50	10.50	11.25	11.25	11.50	11.25	11.25	11.25	11.25	11.25	11.25
Philippines	10.04	12.08	12.63	12.74	12.65	12.65	12.69	12.76	12.76	13.20	13.51
Singapore	3.17	4.01	6.18	6.77	6.86	6.84	6.60	6.58	6.57	6.34	6.54
South Africa	8.17	7.61	4.30	6.31	6.89	7.59	7.82	7.89	9.08	10.26	11.58

Representative money-market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money-market instruments, other than Treasury bills, at or near end of month

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
United States	6.84	10.57	13.70	17.62	16.67	15.48	14.25	16.80	16.94	17.07	17.62
Canada	7.25	10.62	14.15	17.50	16.95	16.85	17.05	17.55	19.00	19.35	21.10
Japan	5.89	4.64	8.01	9.80	8.32	8.46	7.34	6.76	7.49	7.20	7.12
Australia	9.75	9.10	10.30	13.00	13.25	14.00	15.10	15.75	15.50	16.00	16.00
United Kingdom	6.50	12.50	17.00	14.75	13.19	12.50	12.50	12.37	12.44	12.56	14.69
Belgium	9.50	9.25	14.45	13.10	12.35	13.00	14.00	17.00	16.85	15.25	16.50
France	9.19	6.44	12.62	11.56	11.25	13.50	12.75	13.37	18.25	18.25	17.12
Germany	3.60	3.70	8.70	10.20	9.45	14.50	13.30	12.90	13.30	12.90	12.90
Ireland	6.75	13.00	18.12	13.62	13.87	14.78	14.00	15.37	15.94	15.88	17.50
Italy	11.75	11.37	17.12	17.37	17.37	17.50	19.75	19.75	20.00	20.50	20.37
Netherlands	6.25	10.50	13.00	9.37	9.50	11.25	10.37	11.25	12.25	11.87	13.37
Spain	12.06	22.60	13.20	17.40	17.40	15.00	13.20	13.79	16.28	17.02	16.01
Switzerland	2.02	0.50	6.12	7.50	6.00	8.50	9.37	10.00	10.50	10.37	9.62
Hong Kong	5.73	11.82	14.37	17.69	15.53	16.86	16.27	16.45	17.55	17.00	17.15
Korea	16.88	17.01	19.53	16.35	16.35	16.35	16.35	15.60	15.70	15.70	15.70
New Zealand	11.87	12.00	16.00	14.25	14.35	14.80	15.60	14.70	14.50	13.90	14.90
Philippines	11.96	11.48	10.41	15.01	15.98	16.86	16.63	16.67	17.50	16.66	15.16
Singapore	4.81	7.38	10.12	14.12	14.25	13.69	11.69	10.06	12.44	12.31	14.44
South Africa	9.00	7.85	4.72	7.12	8.42	9.73	9.89	9.84	12.37	15.05	16.12

Commercial bank deposit rates

at or near end of month

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
United States	6.80	10.90	13.55	16.25	16.00	14.75	13.50	16.75	16.75	17.15	17.75
Canada	7.25	10.45	14.05	17.00	16.90	17.15	16.85	17.50	18.50	19.30	21.05
Japan	3.25	2.50	8.37	9.00	8.72	8.25	7.25	7.35	7.40	7.60	7.55
Australia	9.50	8.50	10.25	12.71	12.85	14.14	14.95	16.17	15.43	15.23	15.54
United Kingdom	6.37	12.25	16.81	14.87	13.44	12.37	12.44	12.41	12.50	12.56	14.56
Belgium	9.50	9.87	14.50	12.63	12.13	13.50	15.50	16.75	16.50	15.25	16.00
France	9.00	6.50	12.50	11.25	11.25	12.00	13.00	15.00	16.00	17.00	16.50
Germany	3.40	3.50	7.75	8.00	8.70	13.50	12.50	11.75	12.25	12.00	12.00
Italy	17.00	12.50	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25
Netherlands	7.00	11.62	13.50	9.50	9.62	11.50	10.50	11.50	12.25	11.87	13.62
Austria	9.00	6.75	8.50	11.25	10.00	9.75	11.50	11.75	12.50	12.50	12.37
Denmark	8.00	7.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Finland	4.25	3.25	4.25	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Ireland	6.87	12.75	17.87	13.62	13.50	14.62	13.50	15.12	15.75	15.63	17.00
Norway	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Spain	4.50	4.50	4.50	4.50	4.50	4.50	4.50	12.00	13.00	13.00	13.00
Sweden	7.75	6.25	8.75	9.75	11.75	11.25	11.25	11.25	11.25	11.25	11.25
Switzerland	1.12	0.12	4.75	7.50	6.12	8.50	7.25	8.50	9.00	9.00	8.50
Argentina	n.a.	86.63	72.64	72.00	76.50	97.00	130.00	87.00	123.00	150.00	130.00
Brazil	39.60	46.80	45.00	69.48	72.00	72.84	73.44	75.36	76.20	75.48	73.92
Hong Kong	1.75	4.50	9.25	13.00	13.00	13.25	13.00	13.00	13.00	13.00	13.00
Korea	13.20	15.00	15.00	14.82	14.82	14.82	14.82	14.82	14.82	14.82	14.82
Mexico	11.00	12.00	16.75	26.15	27.13	27.00	26.65	26.70	27.25	28.35	n.a.
New Zealand	11.00	12.00	15.90	13.50	13.75	14.00	14.50	14.30	14.60	14.00	14.80
Philippines	8.50	8.50	10.50	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Singapore	5.31	7.31	10.31	13.19	12.62	12.19	10.75	9.12	11.88	11.31	13.12
South Africa	8.70	7.30	4.82	7.87	9.25	10.75	10.27	10.87	13.37	15.75	16.37
Venezuela	7.00	7.25	15.00	16.00	16.00	16.00	14.00	14.00	14.00	14.00	14.00

Commercial bank lending rates to prime borrowers

at or near end of month

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
United States	7.75	11.75	15.25	21.50	20.00	19.00	17.00	18.00	20.50	20.00	20.50
Canada	8.25	11.50	15.00	18.25	18.25	18.25	17.75	18.25	19.50	20.00	21.75
Japan	5.47	4.50	6.51	8.16	7.94	7.86	7.74	7.52	7.33	7.10	7.10
Australia	11.50	11.00	10.75	13.50	13.50	13.50	14.25	15.00	15.00	15.75	15.75
United Kingdom	8.00	13.50	18.00	15.00	15.00	15.00	13.00	13.00	13.00	13.00	13.00
Belgium	10.00	10.00	15.25	15.75	15.25	15.25	16.50	19.25	18.75	17.50	18.00
France	10.30	9.80	12.50	12.25	12.25	13.00	13.75	13.75	17.00	15.90	15.30
Germany	6.00	5.50	9.75	11.50	11.50	12.00	13.75	13.75	14.25	14.25	14.25
Italy	16.00	15.00	19.50	20.50	20.50	21.00	22.50	22.50	21.50	21.50	21.50
Netherlands	7.00	12.00	15.00	10.75	10.50	10.75	11.25	11.25	13.25	13.25	14.75
Austria	9.75	8.75	8.50	12.50	12.50	12.50	12.50	12.50	13.00	13.50	13.50
Denmark	12.50	10.00	13.75	13.75	13.75	13.75	13.75	13.75	13.75	14.00	14.50
Finland	8.85	7.87	9.06	9.83	9.84	9.84	9.85	9.85	9.86	9.85	n.a.
Ireland	8.25	13.75	16.00	14.50	14.50	14.50	14.50	14.50	15.50	15.50	15.50
Norway	8.33	11.00	11.00	12.50	12.50	12.50	12.50	12.50	13.75	13.75	13.75
Spain	9.00	9.00	9.00	18.50	18.72	16.92	15.46	15.11	17.25	18.25	17.81
Sweden	10.25	8.50	10.75	11.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75
Switzerland	5.75	5.00	5.00	5.75	5.75	6.00	6.50	7.00	7.00	7.00	7.00
Argentina	152.08	86.75	80.00	77.00	81.00	114.00	146.00	90.00	141.00	161.00	140.00
Brazil	52.05	61.70	57.00	88.00	133.75	133.75	133.75	133.75	127.38	129.50	127.63
Hong Kong	4.75	8.75	14.50	17.00	17.00	17.00	17.00	17.00	17.00	17.00	18.00
Korea	15.00	18.50	18.50	19.50	19.50	19.50	19.50	19.50	19.50	19.50	19.50
Mexico	17.00	17.50	19.00	24.25	25.46	25.98	26.59	26.91	27.22	29.66	28.42
New Zealand	8.50	9.75	11.75	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Philippines	14.00	14.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	18.00
Singapore	7.02	7.65	9.50	13.60	14.30	14.30	13.68	12.72	12.55	13.40	14.32
South Africa	12.50	11.50	9.50	9.50	10.00	11.00	11.50	11.50	13.00	14.00	16.00
Venezuela	9.50	10.25	13.00	15.00	15.00	15.00	13.00	13.00	13.00	13.00	13.00

Domestic government bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
United States	7.97	9.00	10.20	11.46	12.76	13.16	13.21	14.13	13.52	13.44	14.24
Canada	8.77	9.68	11.32	12.69	12.96	13.38	13.48	15.07	14.96	15.03	17.07
Japan	6.40	6.40	8.63	9.04	8.84	8.89	8.67	8.84	9.23	9.20	9.31
Australia	9.50	8.90	10.45	13.00	13.10	13.10	13.10	13.10	13.10	13.20	14.30
United Kingdom	10.53	12.75	13.83	13.05	13.25	13.36	12.86	13.18	13.50	13.98	14.45
Belgium	8.76	8.80	11.13	13.04	13.19	13.44	13.57	13.52	13.85	14.18	13.97
France	11.07	9.94	12.59	14.31	14.58	15.05	14.98	14.95	17.25	17.35	17.11
Germany	5.52	6.65	7.91	9.19	9.07	10.38	9.97	10.12	10.68	10.30	10.45
Italy	10.82	10.89	11.28	12.12	12.44	12.88	14.46	14.53	14.27	13.81	14.09
Netherlands	8.11	8.48	9.29	10.48	10.43	10.96	11.38	11.29	11.89	11.43	11.57
Austria	9.00	7.91	8.20	9.62	9.80	10.06	10.33	10.18	10.36	10.78	n.a.
Denmark	16.83	17.27	18.28	19.98	19.01	19.29	19.67	20.26	20.59	20.75	21.32
Finland	10.25	9.19	9.58	10.42	10.92	10.92	10.96	10.97	10.96	10.96	10.96
Ireland	11.30	13.44	16.64	15.63	16.22	16.01	16.12	16.57	16.99	17.31	n.a.
Norway	8.37	8.19	10.04	10.44	11.70	11.50	11.57	11.65	11.65	11.65	11.65
Spain	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13.00	12.75	12.75	12.75
Sweden	9.84	10.09	11.22	12.61	12.66	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Switzerland	3.75	3.03	4.20	4.63	4.79	5.20	5.40	5.79	5.85	5.59	5.52
Argentina	181.65	112.18	47.94	36.84	34.97	42.99	66.43	65.64	144.24	108.79	184.60
New Zealand	10.00	10.02	12.98	12.99	12.81	12.97	12.88	12.85	12.85	n.a.	n.a.
Philippines	13.40	13.40	13.20	13.40	13.40	13.40	13.40	13.42	13.41	13.41	13.41
South Africa	10.75	9.85	9.44	11.81	12.48	12.73	12.75	12.69	13.03	13.05	13.07
Venezuela	7.24	7.24	7.29	7.39	7.44	7.40	7.30	10.00	10.00	10.00	11.00

Domestic corporate bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
United States	8.30	9.25	10.75	13.00	13.63	14.13	14.00	15.00	14.25	14.63	15.75
Canada	9.71	10.34	12.07	13.62	13.84	14.34	14.41	16.03	15.94	15.93	17.93
Japan	6.68	6.94	8.34	8.60	8.49	8.25	8.15	7.95	8.09	8.22	7.90
Australia	11.00	10.25	11.65	14.25	14.25	14.10	14.25	14.50	15.00	15.25	16.00
United Kingdom	11.88	13.53	14.96	14.21	14.20	14.14	14.35	14.44	14.94	15.31	16.02
France	12.09	10.27	12.92	15.23	14.62	15.13	15.59	15.39	15.35	15.37	18.20
Germany	5.92	6.80	8.20	9.50	9.50	10.00	10.90	10.90	11.40	11.70	11.70
Italy	10.71	10.12	10.22	12.99	12.80	13.05	16.82	17.01	19.84	20.02	21.50
Netherlands	7.90	8.62	9.95	10.71	10.46	10.77	11.21	11.07	11.76	11.66	11.40
Norway	8.59	8.37	10.53	11.24	11.75	12.07	12.36	12.76	12.76	12.76	12.76
Spain	11.58	13.49	14.20	14.82	14.28	14.36	14.55	14.73	14.51	14.51	n.a.
Sweden	9.83	10.03	10.21	11.95	13.37	13.46	13.56	13.63	13.66	13.65	13.65
Switzerland	4.96	4.85	5.53	5.63	5.78	5.93	6.08	6.08	6.44	6.33	6.09
Korea	19.60	24.00	32.50	26.30	26.30	24.70	23.00	22.30	22.30	22.30	22.30
Mexico	17.56	20.37	21.99	28.03	28.33	30.90	30.20	30.97	28.92	30.71	31.63
Venezuela	10.39	12.43	14.55	16.15	16.65	16.20	16.00	16.25	16.30	16.50	17.00

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World Financial Markets

Morgan Guaranty Trust Company of New York

September 1981

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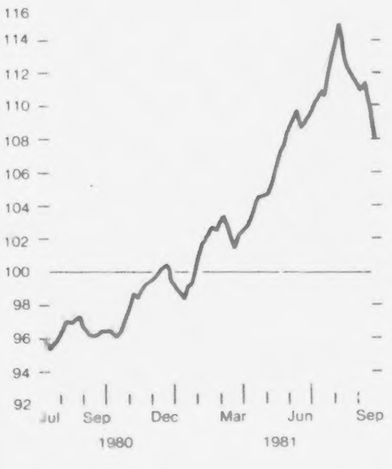
Nominal effective dollar exchange rate
weekly averages
index, March 1973=100



U.S. economic policies and the dollar

The dollar has weakened significantly in foreign exchange markets following congressional passage of the Reagan Administration's fiscal program. Since its peak in early August of this year, the dollar has slipped against all the major currencies, falling by about 13½% against the mark and other EMS currencies and by about 9% against the yen (see Table 1). On a bilateral trade-weighted basis, it is down by about 7% from its level at the beginning of August. This represents about a one-third reversal of the dollar's climb since President Reagan's election last November. Nevertheless, the dollar is still some 12% above its effective level of a year ago (see chart) .

This fairly sharp turn in the dollar has reflected several developments. Until early August, the dollar had benefited from a number of favorable factors such as a strong U.S. current account position, high real U.S. interest rates, declining U.S. inflation, and renewed confidence in U.S. economic policies, as well as from adverse economic and political developments abroad. Lately, however, it is increasingly apparent that some of these favorable factors supporting the dollar are less potent today. First of all, there has been a shift in current account trends and prospects among the major industrial countries. While the U.S. current account balance remains in sizable surplus, there are definite signs of improvement in the positions of both Germany and Japan. Germany's current account on a seasonally adjusted basis has been close to balance in recent months, while Japan's current account has turned decisively into surplus. Second, the Federal Reserve, while not changing its money supply targets, has allowed bank reserve growth to accelerate significantly in the past couple of months following a period of virtually no growth in the first half of this year. This has led to a noticeable decline in the Fed funds trading range from 18%-19% during most of this summer to 15%-16% recently. Finally, doubts about the feasibility and consistency of the Reagan economic program have been raised in light of persistent high long-term interest rates, amidst signs of a weakening U.S. economy.

The recent easing of U.S. monetary policy, as indicated by the 15% annual rate increase in nonborrowed reserves over the last thirteen weeks and the 1% reduction in the surcharge on borrowing from the Fed

Table 1

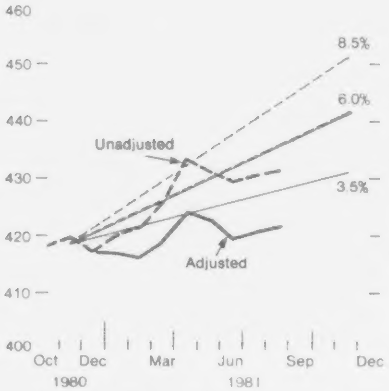
Exchange rate changes from August 4, 1981 to September 21, 1981

percent vis-à-vis dollar and on a trade-weighted average basis

	Vis-à-vis dollar	Trade-weighted average basis
Dollar	—	—6.7
Canadian dollar	3.6	2.3
Japanese yen	9.3	5.4
Belgian franc	13.3	2.1
Dutch guilder	13.7	2.6
French franc	13.4	3.2
German mark	13.5	3.4
Italian lira	9.9	0.0
Swiss franc	15.2	5.1
British pound	2.7	—5.6

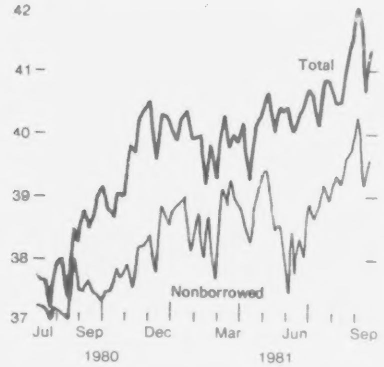
U.S. money supply (MI-B) and target ranges

in billions of dollars



Bank reserves (total and nonborrowed)

unadjusted for changes in reserve requirements in billions of dollars



appears to be mainly a technical correction, rather than a fundamental shift in the basic thrust of U.S. monetary policy. M1-B has been nearly flat since early June, after a sharp decline during the spring. It is currently below the lower end of the target growth band for this year both on adjusted and unadjusted bases for shifts into NOW accounts (see chart). While the recent sharp acceleration of nonborrowed reserves (and to a lesser extent of total reserves) has raised the specter of a repeat of the Fed's failure last year to contain M1-B growth within the target range, such acceleration appears to be the necessary correction for the current undershooting of M1-B. This was the stated objective behind the Fed decision at the July FOMC meeting to raise M1-B growth to a 7% annual rate during the third quarter of this year. Given the extent of previous shortfalls, (unadjusted) M1-B growth could average a 10% annual rate in the remainder of this year and still wind up below the midpoint of the target range for the full year.

One factor undoubtedly influencing recent Fed decisions is the growing sign of weaknesses in the economy. During the second quarter, real GNP growth turned negative, and the Department of Commerce's preliminary estimate indicated a further decline of about 0.5% at an annual rate in the third quarter. The unemployment rate also has begun to climb again. The index of leading economic indicators has fallen for four consecutive months, suggesting no immediate turnaround in the economy.

A second factor bearing on the Fed is the adverse effect that prolonged high interest rates are having on interest-sensitive sectors of the economy such as housing, consumer durables, and financial institutions. In the latter case, relaxation of ceilings on deposit rates and such financial innovations as money-market mutual funds have helped to mitigate the tendency toward financial disintermediation. At the same time, sustained high interest rates have significantly impaired the balance sheet positions of financial institutions, which tend to be large, net fixed-rate-asset holders, weakening their solvency.

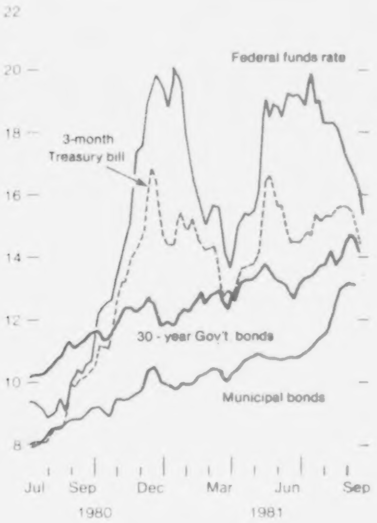
The recent fall in the Fed funds rate, now approaching 300 basis points since early August, has not been matched by declines in other market rates. The rate on 3-month CDs is down by only about 200 basis points while the prime rate is down by 100 basis points over the same period. Yields on long-term bonds rose substantially, climbing to new record levels in early September before easing slightly. Yields on thirteen-year U.S. government bonds, for example, climbed by 90 basis points to a record level of 14.7%, and are currently hovering around 14.2% (see chart).

The sustained upturn in bond yields has occurred at a time of decelerating inflation in the United States, and has produced high real interest rates before taxes. Consumer price inflation has decelerated to about a 9% rate so far this year from a 13½% rate in 1980, and producer price inflation has dropped even faster, to less than a 6% rate in the last four months. The high real yield on bonds and the recent plummeting of stock prices have resulted in a substantial erosion of the private sector's net wealth position, with adverse implications for consumer spending and an investment-led recovery. Growth of personal income, however, has remained high partly because of gains in interest payments.

The recent plummeting of bond and stock prices appears to be mainly a reaction to a deteriorating outlook for the federal government budget next year and beyond (see

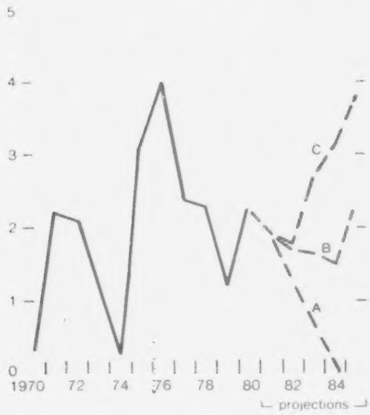
Selected interest rates

in percent



Federal deficit

percent of GNP

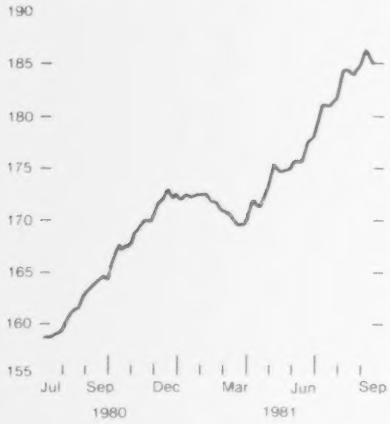


A – Administration's projection
B – Congressional projection assuming the implementation of unspecified spending cuts
C – Congressional projection without the implementation of unspecified spending cuts

chart). For the 1982 fiscal year, beginning October 1, 1981, many private forecasts now anticipate a budget deficit of $70 billion or more on the basis of present policies and economic outlook. This would represent the largest U.S. deficit in history and be substantially above the Administration's estimate of $42.5 billion, which assumes implementation of an additional $4 billion in unspecified budget cuts. Part of the discrepancy between the private and official estimates reflects different assumptions about next year's average interest rates on U.S. government securities. Administration officials now concede that interest rates are likely to be higher than the 10½% rate assumed in the official forecast. On average, each percentage point difference in interest rates maintained for one year from October 1, 1981 implies about a $3 billion change in government interest payments for the fiscal year. Apart from their impact on government expenditures, continued high interest rates will combine to reduce economic growth prospects in the United States. The Administration is still holding to its projected 3½% growth rate for real GNP in 1982 (implying a 5.2% rate of increase from fourth quarter to fourth quarter) whereas actual growth may be closer to about 2%. Such a difference in growth rate assumptions accounts for about $10 billion of the difference in private and official forecasts of the budget.

Another source of the difference in private and official estimates of the future budget deficits involves the revenue effects of some provisions of the 1981 tax bill passed by Congress in early August. Whereas the Administration was prepared to compromise on an original "clean" tax bill, which touched only individual income taxes and business depreciation allowances, the final bill that cleared Congress turned out to be far more wide-ranging and complex, adding over a five-year period about $150 billion in tax cuts from sources other than the two originally targeted. It included a large number of items that were introduced very late in the debate, such as tax changes on leasing arrangements and the introduction of the All Saver certificate, which provides tax-exempt status for interest on specified deposits of up to $2,000 per family. Whereas Congress estimates that both of these items could cost the government about $3 billion each in tax receipts, private estimates of the lost revenues range up to $10 billion for the All Saver certificate and $8 billion for the leasing arrangements.

As a result of the above factors, the federal government is expected to face very large net borrowing requirements, most of which will be concentrated in the next two quarters, when it is expected to raise about $60 billion of net new funds. In view of its already very large participation in domestic credit markets, with federal borrowings last year accounting for about 35% of total funds raised in U.S. credit markets, the prospect of further large federal borrowings ahead has renewed concerns that private borrowers and state and local entities will be crowded out. Given the present depressed state of the bond and stock markets, corporations have been relying heavily on short-term borrowings from banks to cover their financing needs (see chart). The ability of state governments and municipalities to raise long-term funds also has been adversely affected by changes in the tax laws that have made tax-exempt bonds less attractive. Thus, even though short-term interest rates have been declining recently, it is unlikely that this trend will persist for very long, barring a further substantial weakening of the economy.



Business loans
weekly reporting large commercial banks, seasonally adjusted in billions of dollars

Policy response

The financial markets' response to the budget outlook poses the most formidable challenge yet to the Reagan economic strategy. This strategy, blending the monetarist and supply-side approaches, called for monetary policy to be targeted to reduce inflation and inflationary expectations through a program of steady deceleration of U.S. money-supply growth, while fiscal policy provided the impetus for sustained economic growth through a multi-year package designed to reduce tax disincentives to private saving and investment and to bring about retrenchment of the government sector. Dismantling regulatory barriers to competition and private initiative was also an essential element of the strategy. In order to achieve its twin objectives, the Administration has counted on being able to convince financial markets that its economic program of reducing inflation and simultaneously stimulating economic growth was indeed feasible. It has assumed that lower interest rates would follow a reduction of inflation and lead the way to an investment-led recovery, yielding "disinflation without tears."

Given the present situation of high interest rates, however, there is considerable doubt today about whether the uneasy alliance of the monetarists and supply-siders in the Administration can hold together. The monetarists favor continuing the present course of a gradual, but steady, reduction in U.S. money-supply growth in order to achieve a sustained reduction in U.S. inflation, but are prepared to accept somewhat lower growth in the next year or two in order to alter long-run inflationary expectations. The supply-siders, however, are becoming increasingly alarmed that, without a substantial easing of U.S. interest rates, any hope of a sustained investment-led recovery will be dashed. Adding to their concerns are the diminished investment incentives implied not only by high interest rates and a poor corporate profits outlook, but also by the deterioration in the market value of corporations' physical assets relative to the replacement cost of these assets.

The manner in which the Administration responds to the latest challenge and its ability to reverse current market sentiment, therefore, will have an important bearing on the ultimate success or failure of the Reagan economic strategy. While a number of policy options are available, only a few are likely to ensure the long-term success of the Reagan program.

U.S. monetary policy: no basic change

One option that should definitely be rejected is a basic change of U.S. monetary policy that would permit money-supply growth above the target range. Pressures on the Federal Reserve to alter its basic posture of monetary restraint and to lower interest rates substantially are likely to build as the economy shows further signs of weakening. As noted earlier, some temporary acceleration of M1-B growth may be warranted in order to compensate for the present below-target growth. While this appears to be the intent of the recent prodding by the Administration for the Fed to accelerate money-supply growth, continued pressure could be misconstrued as an indication of a fundamental shift in the Administration's stance, reviving memories of stop-go policies under previous administrations. Moreover, given the imperfect control of the money supply, there is a risk that such prodding could lead to an unintended overshoot. A persistent acceleration of money supply would be counter-productive, since it would be interpreted as a clear signal that a significant ingredient of the government's anti-inflation program was being abandoned. This would only exacerbate inflationary expectations and eventually drive interest rates up even higher. By sticking to its present course of monetary restraint, though, further progress toward reducing inflation can be anticipated. This is particularly important in light of the round of major wage negotiations scheduled for next year.

Gold: not a viable alternative

A second option involves restoring some monetary role for gold. President Reagan gave official recognition to this idea last June by appointing members to the federal Gold Commission, which was established in the last months of the Carter Administration. This month, the commission held its second meeting during which a wide range of views was expressed, spanning the polar positions of no domestic or international monetary role for gold to full restoration of an international gold standard. However, even the most ardent backers of an international gold standard concede that a prerequisite is to reestablish some domestic monetary role for gold. Along these lines several proposals have been suggested.

One idea, albeit technical, calls for the U.S. government to offer gold-backed bonds, redeemable either for a fixed weight in gold or for fixed face value in dollars at maturity. Secondary market prices of such bonds would fluctuate with the market price of gold. A specific proposal relayed to the Gold Commission calls for issuing $50 billion of gold-backed bonds in three tranches at perhaps a 3% coupon rate. Even at this low rate it is assumed there would be sufficient interest among those investors who would have purchased gold, since these bonds in effect guarantee a minimum price of gold and yield savings in insurance and other costs of owning gold outright. If fully successful, the issuance of such bonds could save the government perhaps as much as $5 billion in interest costs, thereby reducing the size of the federal deficit and easing the government's short-term cash flow needs. Whether it will constitute a cheaper source of financing over the long term, however, hinges on how successful the government is in lowering inflation, and whether this helps to stabilize the price of gold. If gold prices were to accelerate sharply, issuing such bonds could represent in the end merely a deferred sale of government assets or a higher principal at redemption to finance the budget deficit.

In short, the main attraction of issuing such gold-backed bonds is that it could provide some immediate relief for the government's debt-servicing burden. The disadvantage is that it might weaken the government's resolve to tackle the budgetary problem in a more fundamental way.

A more substantive proposal calls for some restoration of gold's link to the domestic money supply. Specifically, a proposal has been put forth whereby Federal Reserve banks would be required to hold a certain proportion of their note liabilities in gold certificates, as a means of constraining growth of the monetary base and the money supply. Until 1968 Federal Reserve banks were required to keep 25 cents in par value (then $35) gold certificates behind each dollar of their note liabilities, and, in addition, until 1965 they had been required to keep 25 cents behind each dollar of member bank and other deposits on their books. Since these restraints on the Federal Reserve's note creation and its deposit liabilities were removed, money-supply growth and inflation have accelerated substantially. Accordingly, a number of leading monetarists have supported the idea of restoring some link between gold and the money supply as a means of implementing a rule for money-supply expansion. This proposal, however, does not entail restoring convertibility of gold into dollars at some official price, as has been favored by gold standard advocates.

While supporters of the proposal contend that reintroduction of a gold link to money could affect market expectations about U.S. inflation because of the greater monetary discipline implied by its acceptance, it still leaves unresolved a number of substantive issues. The idea underlying the proposal is that it would lessen or remove any discretion in money-supply issuance on the part of the Fed. Yet, the decision to specify a rule for money-supply growth itself involves some discretion. Moreover, there is a danger that if money-supply growth were set at too low a rate, wage and price rigidities could force the full brunt of adjustment to be borne by output and employment. This possibility is implicitly acknowledged by backers of the proposal, who have indicated that the law could be amended, and even rescinded, if it proved to be harmful.

Similar types of problems would arise if the U.S. government were to reinstate gold convertibility at a fixed official price. Under an ideal gold standard, the general commodity value of the dollar (i.e., the general price index) would be stabilized. For this condition to hold, the supply of gold must increase *pari passu* with the increase in the demand for money. Yet, during the gold standard era in the late nineteenth and early twentieth centuries, this equality was only approximated over a long-run span of approximately fifty years as gauged by the virtual stability in the commodity value of the dollar on average. Such stability did not obtain over shorter intervals. For example, during the 1870s and 1880s a low rate of gold production contributed to protracted deflation, while gold discoveries and the introduction of the cyanide process led to inflation in the 1890s and early twentieth century. Thus, restoration of a gold standard would not necessarily ensure that the basic objective of stabilizing the general price level would be met.

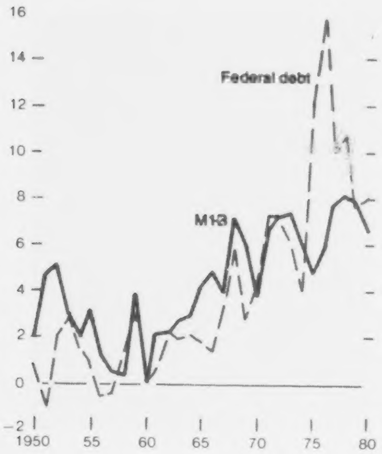
Whatever the long-term merits of restoring some international monetary role for gold — particularly now that the prospect of the SDR becoming the principal international reserve asset has further diminished — it is clear that the mere reintroduction of gold into the domestic financial system, by itself, will not fundamentally alter the market's perception of the government's commitment to monetary discipline. Historical experience indicates that even during periods in which there was considerable wage and price flexibility to attenuate the adverse output and employment effects of money-supply contraction, governments often suspended convertibility to escape the monetary discipline implied by it. Given the existence of more democratic societies today, as well as the presence of organized interest groups, particularly labor which has reduced downward wage flexibility, the likelihood of adhering to man-made rules is even more remote.

Need for fiscal restraint

Ultimately, the only viable course to restore confidence is for the Ad-

Growth in the Federal debt and money supply

percent change from previous year



ministration to persevere with its original program: monetary restraint to tackle inflation, and smaller government to release resources to the private sector. It is particularly important that the Administration respond directly and forcefully to the financial markets' concern about prospective large budget deficits. Certainly, the evidence throughout the postwar era points to systematic monetization of a significant portion of federal deficits (over 20% on average), with the principal exception occurring during the Ford Administration (see chart). It is therefore up to the Administration to convince the markets that past government behavior is not necessarily a guide to the future.

The Administration understandably is reluctant to consider tax increases as a means of narrowing the prospective budget deficits. Such action — if implemented now — would represent a turnaround in the Reagan program. It not only would weaken the economy further, but also would lessen pressures for cutbacks in government spending, thereby replicating the Thatcher experience in the United Kingdom. One tax increase that has some merit at this time is the raising of levies on gasoline at the federal and state levels. Given recent declines in oil prices, higher gasoline taxes would prevent domestic oil prices from falling and discourage domestic oil consumption, thereby reducing U.S. dependence on imported oil and contributing to additional easing of world oil prices.

If the Administration rules out tax increases at this time, further substantial cuts in government spending will have to be made in order to prevent a steady widening of the federal budget deficit. To date, virtually all cuts have come out of nondefense expenditures. While the president announced that he will request some $2 billion in defense cuts for the 1982 fiscal year, and an additional $13 billion in the two subsequent years, they are miniscule in relation to planned defense expenditures of $186 billion in fiscal 1982, as well as to the total amount of expenditure cuts needed. It is widely presumed that the president's initial modest request on defense expenditures is merely a bargaining ploy for dealing with Congress on politically sensitive areas such as entitlement programs and indexation of benefits to cost-of-living increases. Indeed, the president recently has announced his plans to seek cuts in the so-called social safety net programs that had previously been considered untouchable.

It must be acknowledged that additional expenditure cuts entail the risk of a further weakening of the economy in the near term. However, there simply is no easy fix to the problem of an upward ratcheting of U.S. inflation over the past two decades. Insofar as the Administration succeeds in providing assurances that effective measures are in place to bring about a steady reduction of future budget deficits and inflation, there will be long-run payoffs in the form of more modest wage settlements and lower interest rates.

Assuming that the government sticks with giving the fight against inflation top priority, U.S. interest rates are likely to remain rather high by historic standards for the foreseeable future. This should entail low U.S. economic growth over the next six to nine months. It will also lessen the chances for significant reductions in foreign interest rates, which themselves are at, or close to, record levels. In fact, interest rates in a number of countries such as Britain, France, and Switzerland have been rising recently. As a result, prospects for rapid economic recovery abroad appear slim. At this juncture, however, the

United States cannot play locomotive to the rest of the world.

As regards the foreign exchange markets, the dollar's 7% depreciation over the past two months was not entirely unexpected in view of its very sharp appreciation since last fall. Some further, albeit more moderate, easing of the dollar can even be anticipated in the near term as a result of the strengthening of Germany's and Japan's current account positions, as well as a narrowing of short-term interest rate differentials in favor of the dollar.

Over the longer run, however, there are a number of factors that are likely to support the dollar. One factor is the broad-based strength of the U.S. current account, which now is expected to be in surplus by about $6-$8 billion this year. Even though some erosion of the U.S. current account position appears inevitable next year as a consequence of the dollar's large real appreciation over the last twelve months, low U.S. economic growth, flat oil imports, and a rising surplus on invisibles should keep the U.S. current account not far from balance. Recently publicized projections of a record $15-$20 billion deficit next year appear unduly pessimistic. A second factor supporting the dollar is the maintenance of high real interest rates in the United States, which should help to attract foreign capital to this country. Finally, despite the current uncertainty over the U.S. budget prospects, there remains a considerable basis for optimism about U.S. economic policies. In just nine months' time the Reagan Administration has undertaken a number of fundamental economic actions including the summary termination of price controls on domestic crude oil ahead of schedule in order to signal determination to reduce U.S. dependence on imported oil; an unprecedented rolling back of government sector encroachment on the economy through cutbacks in government-sponsored programs and the dismantling of regulatory barriers; active promotion of a program of sustained monetary restraint to fight inflation; and firm resistance to demands for inflationary wage settlements. By following through on its economic program, the Administration will provide the basis for reduced inflation and a favorable U.S. investment climate, thereby strengthening the underlying balance-of-payments position of the United States.

The OPEC surplus

Oil prices have continued to drift lower. The inability of OPEC members at their recent meeting to come to an agreement on a unified price structure, and implicitly on production levels, has increased market pressures for downward oil price adjustments. This disunity could well result in lower oil prices for the rest of 1981 and 1982 than would otherwise have been the case.

In late August Nigeria became the first OPEC member to cut prices, following similar moves by non-OPEC oil exporters earlier this summer. The Nigerian reduction was presented as a 10%, or $4 per barrel, discount from official prices, which remain at a notional $40 level. This has already led to cuts in the official prices of two small African producers, Gabon and Congo, and is intensifying the pressure on the other two African OPEC members, Algeria and Libya, for similar adjustments. The pressure on Iran, Iraq, and Kuwait is also increasing.

The recent adjustments brought the effective average OPEC oil price in early September to $34 per barrel, a level 5% below that of January 1981 and close to that of December 1980. Without any further

Table 2

Oil demand and supply[1]

excluding Communist countries
millions of bpd

	1980	1981	1982
Demand, excluding OPEC	47.6	44.1	45.2
United States[2]	17.0	16.2	16.2
Japan	5.0	4.7	4.8
Europe	13.7	12.7	12.7
Other industrial	2.9	2.8	2.8
Non-OPEC LDCs	8.7	8.5	8.7
Consumption	47.3	44.9	45.2
Stock changes	.3	—.8	0.0
Non-OPEC supplies	22.2	22.6	23.0
Industrial countries[2,3]	16.5	16.4	16.6
Mexico	2.1	2.5	2.7
Other LDCs	3.6	3.7	3.7
OPEC exports[1]	25.4	21.5	22.2
OPEC domestic consumption	2.3	2.6	2.9
OPEC production[1]	27.7	24.1	25.1

[1] Including natural gas liquids (NGL).

[2] Including U.S. processing gain.

[3] Including net Communist exports to the West.

Table 3

OPEC import prices and terms of trade

monthly averages

	OPEC effective oil price, in $	Index of OPEC import prices, in $[1]	Terms of trade[2]
Dec 1980	100	100	100
Jan 1981	105	101	104
Mar 1981	104	99	105
Jun 1981	102	93	110
Aug 1981	100	90	111

[1] Index of wholesale prices of nonfood manufactures in industrial countries expressed in dollar terms and weighted by the share of these countries' exports in OPEC imports.

[2] Ratio of oil prices to import prices.

cuts, the average effective OPEC oil price for 1981 as a whole would be on the order of $34.70, less than a 10% rise from 1980. However, unless OPEC members come quickly to an agreement to unify prices, further reductions are likely. Depending on their size and oil production levels, these cuts could well bring the effective OPEC oil price during the remaining months of 1981 to as low as $33.

One of the main reasons for the steady fall in oil prices this year is the continued decline in oil consumption. Following a drop of over 7% in 1980, oil consumption in industrial countries is heading for another large decline, of 5%-6%, in 1981 (see Table 2). The most pronounced reduction this year is in Western Europe where the strength of the dollar has resulted in substantial oil price increases in domestic currency terms.

The decline in oil consumption during 1980-81 has left industrial countries with excess oil stocks, above the normal seasonal requirements. This together with high interest costs, has led many oil companies to draw down their inventories during the third quarter of 1981, in contrast to the traditional stockbuilding that occurs during this period and has further dampened demand for oil purchases from abroad.

OPEC crude oil *production* has fallen steadily this year, to perhaps about 20 million bpd currently from 24.6 million bpd in January and a peak of over 31 million bpd in 1977. This suggests that after allowing for domestic OPEC consumption, OPEC *exports* for the year as a whole are likely to average less than 22 million bpd, a decline of more than 3½ million bpd from 1980 and of over 7½ million bpd from 1979.

Another major influence on oil prices this year has been Saudi Arabia's high-production-and-low-price policy. This has forced high-priced oil exporters, both OPEC and non-OPEC, to absorb all of the decline in world oil demand and is leading some to cut prices in order to recoup oil sales. For most of these countries production is now at levels where further cuts are difficult. Oil production in the twelve OPEC members outside Saudi Arabia is estimated now to be down by 25% from January 1981 and 30% from a year ago.

In light of this, Saudi Arabia's announcement of a 10% reduction in its oil production in September, to just over 9 million bpd, is not likely to alter the weak oil market situation or cause oil prices to strengthen. The cutback should be seen primarily as a goodwill gesture to help those exporters who cut prices to recover some oil export volume. Recent official Saudi statements suggest that the decision also reflected a desire to protect the floor OPEC price of $32 (charged by Saudi Arabia), which in recent weeks has come under market pressure. Thus, the upcoming seasonal pickup in oil consumption during the winter months is likely to be easily covered by the large number of oil exporters, OPEC and non-OPEC, willing and needing to boost their oil sales. Moreover, Saudi Arabia has indicated that it will be reviewing its oil production monthly, and presumably will raise it again should price pressures develop. Furthermore, in view of high oil stocks and interest rates, the seasonal increase in the oil imports of the major oil-consuming countries may be less than usual.

Despite the fall in oil prices since the beginning of 1981, OPEC terms of trade, that is, the purchasing power of OPEC exports, have improved as a result of the strength of the dollar in foreign exchange markets. This is because the bulk, 94% last year, of OPEC merchandise exports

Table 4

Industrial countries' merchandise exports[1] to OPEC

	1980 $ billions	*1981 year-to-date % change from year ago*	
United States	17.8	29.8	(Jan-Jul)
Japan	18.4	20.8	(Jan-May)
France	9.9	9.5	(Jan-Jun)
Germany	12.5	10.8	(Jan-Jun)
Italy	9.9	26.6	(Jan-Apr)
United Kingdom	10.6	24.7	(Jan-Feb)

[1] The merchandise exports of the United States and of some other industrial countries do not include all of their sales of military equipment abroad, part of which is reported in services exports.

Table 5

The OPEC current account 1980-82

billions of dollars

	1980	*1981*	*1982*
Exports of goods and services[1]	304	300	316
of which: oil revenues	277	268	281
Imports of goods and services[1]	—202	—227	—269
Investment income, net[2]	9	12	14
Current account	111	85	61
Official transfers, net	—8	—8	—7
Current account after transfers	103	77	54

[1] Excludes investment income but includes private transfers.

[2] Excludes oil-sector investment income, which is included in the calculation of oil revenues.

consists of oil, almost all of which is paid for in dollars, while OPEC merchandise imports are spread over a variety of countries and currencies, with the United States supplying only about 14% last year. The stronger dollar has led to a steady decline in OPEC import prices in dollar terms so far this year, which has more than offset the fall in nominal oil export prices.

In the absence of complete data on OPEC import costs, an indication of their trend can be derived from the index of wholesale prices of manufactures in major industrial countries (which accounted for over 70% of OPEC merchandise imports last year), converted into dollars and weighted by those countries' share in OPEC imports (see Table 3). According to this index, OPEC import costs fell by more than 10% between January and August of this year, offsetting the 5% decline in nominal oil export prices during this period, and leading to a more than 6% improvement in the terms of trade. For 1981 as a whole, OPEC terms of trade, thus measured, may register an increase of nearly 14%.

The drop in OPEC dollar import costs is helping to maintain the growth in OPEC import volume, which, in light of the decline in oil revenues in some countries this year, could have slowed down. Excluding outflows of investment income, the volume of OPEC imports of goods and services may be up by nearly 17% in 1981, compared with a rise of less than 15% in 1980. Data on industrial countries' exports to OPEC so far this year support this trend (see Table 4). The largest import increases are occurring in Iraq, Indonesia, and Saudi Arabia.

OPEC earnings on investments abroad are benefiting this year from higher interest rates. This increase is being partly offset by the parallel growth in the outflows of investment income from OPEC countries, because of higher interest payments on OPEC external debt and rising income on foreign direct investment in OPEC countries. *Net* OPEC investment (excluding the oil sector) grew from $3½ billion in 1979 to over $9 billion in 1980, according to official statistics. Measured on the same basis, it may be up to $12 billion this year. However, in light of the $165 billion increase in OPEC *net* external assets between 1978 and 1980 and the fact that 45% of OPEC investments at end-1980 consisted of bank deposits and other short-term assets earning high interest, the growth in reported net investment income is much too small. This apparent shortfall probably reflects the rapid growth in private OPEC investments abroad in recent years and the difficulty of capturing in the official data all of the earnings on these investments, as well as the different treatment of these earnings in the balance of payments of various countries. These differences in part explain the statistical discrepancy that results from the summing up of world current account balances.

In spite of lower import prices and higher interest earnings, the OPEC current account surplus is likely to decline this year. These favorable developments should not be adequate to offset the negative impact of the sharp fall in OPEC oil export volume and the increase in import volume. Before official transfers, the 1981 OPEC current account surplus may fall by $25 billion in 1981 from over $110 billion in 1980 to $85 billion (see Table 5). Saudi Arabia's surplus before official transfers, is likely to continue to be on the order of $40 billion, as a result of the large share of its oil exports in the OPEC total.

A further decline in the OPEC surplus appears likely in 1982. The modest pace of economic recovery

Table 6

Publicized new international bond issues and medium-term Euro-currency bank credits

billions of dollars

		Jan-Sep	
	1980	*1980*	*1981*
International bonds	41.9	30.4	34.0
Euro-currency credits	77.4	50.0	102.8
Total	119.3	80.4	136.8
Total, by country of borrower			
Industrial countries	71.8	46.7	96.5
United States	12.3	6.0	51.5
Canada	5.5	3.2	10.5
France	4.6	3.3	5.1
Italy	7.2	5.4	5.0
Japan	5.4	3.5	5.1
Spain	4.6	3.3	2.9
Sweden	2.8	3.6	2.8
United Kingdom	2.0	2.4	1.2
Netherlands	0.9	1.5	0.5
Others	26.5	14.5	11.9
Non-oil LDCs	17.5	11.7	17.1
Brazil	4.5	2.7	4.0
Korea	2.0	1.2	2.2
Chile	1.4	0.9	1.9
Taiwan	0.4	0.3	1.0
Philippines	1.1	0.6	0.9
Morocco	0.4	0.3	0.5
Hong Kong	0.4	0.3	0.5
Colombia	0.7	0.4	0.6
Ivory Coast	0.2	0.1	0.4
India	0.8	0.1	0.4
Others	5.6	4.8	4.7
Oil-exporting LDCs	20.0	14.6	17.8
Mexico	6.5	4.8	8.3
Venezuela	7.1	6.2	4.0
Nigeria	1.3	0.6	1.4
Peru	0.5	0.4	1.1
Malaysia	0	0	0.7
Ecuador	1.3	1.2	0.8
Indonesia	1.5	0.9	0.7
Other (all OPEC members)	1.8	0.5	0.8
Communist countries	2.9	2.0	1.3
Hungary	0.6	0.3	0.6
East Germany	0.3	0.1	0.4
Romania	0.5	0.3	0.2
Czechoslovakia	0.5	10.3	*
Poland	0.8	0.8	0
Others	0.2	0.5	0.1
International institutions	7.1	5.4	4.1

*$30 million.

in industrial countries next year, together with the continued effect of higher oil prices on conservation and substitution of other energy sources, could keep their oil consumption flat relative to 1981. Oil consumption in the LDCs may show an increase, but non-OPEC oil production should rise further. As a result, OPEC oil *exports* in 1982 may be close to this year's depressed level, with the actual volume to be determined by stock movements. Together with Saudi Arabia's continued moderating influence, these factors are likely to contain the rise in oil prices next year. Indeed it is quite plausible that, in the absence of adverse stock movements or political disruptions, OPEC oil prices after being unified around the $34 level could remain unchanged through the end of 1982. Should unity be achieved in early 1982, it would bring the effective OPEC average price for the year to about $35, only a marginal rise from the likely 1981 average. Under these circumstances, and with the effective 1982 dollar exchange rate likely to be about the same as in 1981, OPEC terms of trade could decline. In this case the OPEC current account surplus could drop by another $20-25 billion in 1982, to around $60 billion before official transfers. Most of this reduction, of about $50 billion from the 1980 peak, would be reflected in an improvement in the current account of the industrial countries.

International credit markets

During January-September, the volume of publicized borrowing in the international credit markets expanded to $137 billion, compared to $80 billion in the same nine months of 1980. Four developments are most striking in this rapid growth — the massive rise in borrowings by U.S. corporations, the jump in Canadian borrowing, a strong recovery of borrowing by the major LDCs, and, on the sourcing side, the continued growth of Arab-led syndications.

The $52 billion of publicized Euro-currency credits and bond issues to the United States during January-September is about eight times the flow during the same period of last year, and this growth accounts for 81% of the overall rise in publicized international credits. Nearly $38 billion involved credit lines arranged by ten U.S. companies to support or ward off potential acquisition efforts, so that some of these facilities may never be used. Even so, the sharp rise in U.S. borrowing still represents a significant spillover of U.S. credit demand into the Euromarket, stimulated in large part by an interest rate differential favoring off-shore funds. Thus, although growing from a small base relative to total U.S. credit demand, the growth rate of Euro-credit to U.S. corporations this year has outstripped that of their domestic borrowing. The tripling of Euro-borrowings by Canada (and, to a lesser extent, France) reflects heightened external financing needs due to adverse trends on both current and capital accounts.

Publicized borrowings by the non-oil LDCs as a group during January-September were $17 billion, up by more than $5 billion or 46% over the same period of 1980. Of the dollar increment, about 60% was due to increased borrowing by three countries — Brazil, Chile, and Korea — while another 30% went to India, the Ivory Coast, the Philippines, and Taiwan.

The general tendency among the major non-oil LDCs this year is toward deeper current account deficits and larger gross borrowing needs. A common adverse factor faced by most of them is the high

Table 7

Selected oil-exporting LDCs: oil exports and current account

billions of dollars

	1979	*1980*	*1981*
Net oil exports			
Mexico	3.2	9.6	14.8
Nigeria	16.6	20.6	22.7
Peru	0.6	0.8	0.7
Malaysia	1.1	1.3	1.1
Indonesia	9.0	14.4	15.9
Venezuela	13.6	18.1	19.0
Current account			
Mexico	—4.9	—6.6	—11.2
Nigeria	3.2	4.0	—4.8
Peru	0.6	0	—1.6
Malaysia	1.4	—0.5	—1.5
Indonesia	1.0	2.9	0
Venezuela	—0.3	4.2	3.8

Table 8

Selected LDCs: external debt owed to commercial banks,[1] based on BIS-reported data

	Average annual % change[2]		*End-March 1981*
	12 months ended March 1981	*1976-80*	*billions of dollars[2]*
Chile	55	59	7.9
Egypt	48	29	3.4
Mexico	40	26	44.3
Nigeria	37	73	4.7
Korea	35	40	17.3
Argentina	35	46	21.4
Ivory Coast	28	66	2.9
Malaysia	27	26	2.6
Taiwan	26	24	5.4
Colombia	25	21	4.5
Venezuela	24	45	24.5
India	22	15	1.1
Brazil	20	29	46.1
Philippines	19	33	8.9
Thailand	18	34	4.1
Turkey	16	31	4.4
Ecuador	16	57	3.9
Israel	15	23	4.4
Peru	15	11	4.0
Indonesia	9	17	6.1
Morocco	1	110	3.5
Tunisia	—6	70	1.1
22 LDCs	27	32	226.2
14 non-oil LDCs	25	34	132.8
8 oil-exporting LDCs	31	30	93.4

[1] Quarterly reported bank claims data adjusted to be consistent with the special biannual BIS report that is more inclusive in coverage.

[2] Rounded to nearest 1%.

level of interest rates internationally, which is resulting in substantial increases in gross interest payments. This is being partially offset by a relative easing of the oil-import burden due to the softness of oil prices experienced this year, oil conservation efforts in many LDCs, and, in some countries, a continued improvement in non-oil trade balances.

The only major exceptions to the trend toward larger current account deficits are Argentina and Brazil, which are experiencing major improvements in their trade balances, leading to modest declines in current account deficits. But even in these two countries, 1981 gross borrowing needs are somewhat higher than last year due to increased amortization requirements and significantly less reliance on international reserves as a source of financing. Indeed, the Brazilian authorities would like to rebuild reserves after the substantial drawdowns of 1979-80. In the Philippines, despite a slightly deeper current account deficit, gross borrowing is likely to be lower than last year because of large drawdowns of international reserves.

Four oil-exporting LDCs (Mexico, Nigeria, Peru, and Malaysia) are also facing enlarged borrowing needs this year (see Table 6). The softness of international oil prices during 1981 is forcing oil exporters to adjust to lower oil revenues. The greatest adjustments are being required of those countries that had priced their oil in the upper tier of the structure of international oil prices since mid-1979 and/or that have followed highly expansionary domestic economic policies in recent years. The initial reaction to these developments, however, has been to step up external borrowing, and in this respect, Mexico and Nigeria stand out most boldly: during January-September, the former's Euro-market borrowings were up by 75% and the latter's by 127%, compared to same period of 1980. More recently, however, the policy reactions in both countries seem to be in the right direction: the necessity for lower, more realistic oil export prices has been accepted, and domestic fiscal/monetary policies are being tightened.

Data on publicized Euro-currency credits and bond issues are the most current available indication of how a large number of countries are financing their gross commercial borrowing needs. From an individual country standpoint, however, Euro-credits are a very partial indicator, in that they may represent only a portion of the total amount of commercial borrowing. No short-term borrowing is included, and the larger borrowers transact a considerable amount of unpublicized term loans. For example, Brazil's publicized Euro-credits during the 1977-80 period averaged about 50% of its gross borrowings from commercial sources and the annual shares during this period ranged from 36% to 77%.

A more precise — though not as current — measure of the LDCs' use of the private international credit markets is the trend in BIS-reported bank loans of the commercial banks in the major industrial countries. Table 7 ranks a selection of 22 LDCs by the growth rate of bank exposure during the year ended in March (the latest reported by the BIS). These countries account for three-quarters of total bank BIS-reported bank claims on all LDCs and 43% of the claims on countries outside the G-10 countries and major offshore banking centers.

The figures in Table 8 indicate that the growth of bank exposures in these countries in the year ended March were generally slower than had occurred in the 1976-80 period.

Table 9

Publicized Euro-currency bank credits, Arab-led syndications[1]

as % of all lenders

	Borrowers		
	Industrial countries	*Non-OPEC LDCs*	*All borrowers*[2]
1978	5	9	10
1979	8	6	9
1980	8	14	10
Jan-Sep:			
1980	9	13	11
1981	14	32	19
Excluding oil-related merger/aquisition facilities to U.S. companies	28	32	29

[1] Loans in which one or more Arab banks, including consortium banks, acted as lead or co-lead managers.

[2] Includes OPEC, Communist countries, and international organizations.

Only six countries — Egypt and Mexico, and to a much lesser extent, Malaysia, Taiwan, Colombia, and Peru — were exceptions to the general slowing. In several of the larger LDC borrowers, the growth of bank debt has been running well below the average rates of the past several years, and at these slower rates, no major problems are being encountered. In Brazil's case, there was some concern over the direction of economic policy last year, but this year sentiment about Brazil in the Euro-market has improved due to favorable policy changes late last year, a continued favorable export performance, and better loan spreads. Projections of external borrowing needs in Argentina, Korea, the Philippines, and Venezuela suggest a slowing of bank debt growth for 1981 as a whole compared to the rates experienced through last March.

On the other hand, the overall growth of bank debt (27% as of March) is still well above most consensus estimates of the growth of bank capital in the industrial countries (an average of 15%-18% per annum), and this wide divergence probably is not sustainable in the longer run. It is highly unlikely that bank capital growth rates can be accelerated in the near future in view of downward pressures on earnings. Thus, the growth rate of these banks' LDC exposures eventually will have to slow.

This slowing will be achieved basically in two ways. First, there will probably be continued slowing in the overall need for bank debt in some of the major borrowers, as they continue to improve their non-oil trade balances and as real interest rates eventually decline from the current high levels. Second, the opening up of new sources of financing to the major borrowing LDCs is very important. In this connection, the rise in Arab bank lending via the Euro-markets is especially welcome. As shown in Table 9, Arab-led syndications were nearly a third of total Euro-currency credits during January-September of this year, if the acquisition-related U.S. borrowings are excluded from the total. This is a major expansion of the Arab banks' role, given their 10% share during calendar 1980. In the future, a stronger bias by Arab banks toward lending to LDCs, as opposed to the industrial countries, would be a further positive development.

Statistical appendix

for key to data in tables see pages 22 and 23

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Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

Effective exchange rates

Index numbers, March 1973=100. The index of the effective exchange rate for a currency is a measure of that currency's trade-weighted average appreciation or depreciation vis-à-vis the currencies of 15 other major countries. The exchange rates used in the construction of this index are the averages of daily noon spot exchange rates in New York for months and for weeks ending on dates shown. The trade weights used are based on 1976 bilateral trade in manufactures.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
pre-June 1970 parities	118.5	94.9	79.3	116.2	91.6	97.5	110.9	95.9	98.2	88.3	97.8	97.9	98.1	102.2	92.2	98.4
Smithsonian central rates	107.0	101.3	88.7	116.0	95.4	96.1	108.3	97.0	99.1	91.6	98.0	96.0	96.3	100.5	91.7	98.1
1980																
July	96.0	84.8	111.7	79.3	138.2	91.1	52.7	110.9	119.1	165.5	122.2	92.5	102.8	87.8	75.1	70.0
August	97.2	84.5	111.1	80.5	137.2	90.7	52.7	110.2	119.0	163.8	122.0	91.8	103.3	88.2	75.7	69.6
September	96.4	83.9	115.8	81.4	137.0	90.4	52.4	109.9	119.1	164.7	121.8	91.4	103.3	88.2	75.4	68.4
October	96.8	83.6	119.4	83.2	135.4	89.9	52.0	109.1	118.3	165.5	121.0	90.5	103.2	88.7	75.4	68.3
November	98.9	82.7	118.8	84.9	134.3	89.0	51.7	108.3	117.7	164.5	119.9	89.5	103.6	89.0	76.1	68.6
December	99.9	82.2	122.0	84.8	133.9	88.7	51.4	107.8	117.0	162.5	119.8	89.4	102.6	88.9	76.6	67.5
1981																
January	99.4	82.5	126.7	87.8	132.8	88.3	51.0	107.2	116.2	160.9	119.4	88.0	101.7	88.8	76.6	66.9
February	102.3	82.5	127.3	87.7	131.7	87.1	50.3	106.3	115.0	159.1	118.8	86.4	103.1	90.2	77.4	65.9
March	102.5	83.1	125.4	85.1	134.0	87.0	49.6	106.1	114.8	160.5	119.8	86.2	103.7	90.1	78.1	65.8
April	104.2	83.5	123.0	84.8	133.8	86.7	48.6	106.2	114.4	160.3	120.1	85.7	104.6	90.5	79.0	65.8
May	107.3	83.4	122.2	84.8	132.6	84.8	48.3	106.3	113.3	160.8	119.5	84.7	105.7	90.9	80.3	66.2
June	109.3	83.6	121.9	82.1	131.9	85.0	47.9	105.8	113.1	165.6	119.0	84.6	104.6	91.1	82.1	65.6
July	111.6	83.6	118.8	79.5	131.6	85.0	47.9	105.6	113.1	167.9	119.4	85.0	104.3	91.2	84.4	65.1
August	113.3	83.0	119.4	78.7	131.3	84.2	47.9	105.8	113.2	165.9	119.7	84.6	105.2	91.1	85.2	64.7
7	115.1	81.9	115.9	78.4	131.2	84.4	48.1	105.4	113.2	165.7	119.8	84.5	105.5	91.4	85.5	65.1
14	114.2	82.5	119.9	78.2	130.9	83.8	48.1	105.5	113.4	167.2	119.2	84.3	105.3	91.2	85.3	64.3
21	112.1	83.5	121.2	79.1	131.4	84.2	47.7	106.3	113.1	165.5	119.5	84.7	104.8	91.0	84.8	64.4
28	111.9	83.7	120.7	78.9	131.8	84.2	47.7	105.9	113.0	165.8	119.8	85.0	105.3	90.8	85.0	64.8
September 4	111.1	84.5	120.0	78.2	132.2	84.5	47.9	106.0	113.6	165.4	120.1	85.6	105.0	90.7	84.8	65.1
11	111.4	84.2	119.0	75.7	132.6	84.8	47.9	106.4	114.5	169.1	120.2	86.3	105.9	90.7	84.9	64.9
18	109.5	84.0	120.1	75.3	134.7	85.6	47.8	107.2	115.8	172.1	121.1	88.3	107.5	82.1	84.2	65.2

Real effective exchange rates

Index numbers, March 1973=100. The index of the real effective exchange rate is the index of the effective exchange rate adjusted for inflation differentials which are measured by wholesale prices of nonfood manufactures. Exchange rates and trade weights used in the construction of this index are the same as those used for effective exchange rate indices. Annual figures are averages of months.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
1977	100.9	99.2	93.3	101.7	102.8	96.6	92.4	99.0	104.2	105.6	109.6	97.3	99.0	105.3	91.8	101.3
1978	96.5	92.1	107.0	106.5	103.5	97.4	90.8	98.6	104.1	122.4	109.7	103.6	94.7	96.8	87.0	97.2
1979	96.5	92.2	95.7	118.9	104.3	99.4	90.7	96.0	100.7	115.7	108.5	101.5	89.6	99.6	85.9	109.3
1980	98.3	91.3	93.5	138.5	101.3	101.2	93.1	90.6	97.5	105.6	109.2	94.1	91.6	101.1	87.4	103.5
1980																
September	96.1	91.3	98.4	142.6	100.4	102.5	93.4	89.5	97.4	104.7	109.7	93.8	91.8	101.3	88.2	100.7
October	97.8	90.8	99.5	145.1	99.4	101.9	92.9	88.5	96.2	104.9	108.5	93.7	92.3	101.5	88.0	100.5
November	99.9	89.9	98.2	147.5	98.8	100.6	93.2	88.2	95.1	104.6	107.1	92.5	93.0	101.8	89.0	101.2
December	100.9	89.3	99.9	146.6	98.2	101.5	93.0	87.5	94.2	103.2	107.5	92.7	92.2	101.7	89.8	100.3
1981																
January	100.7	90.3	102.2	152.4	96.8	99.9	93.6	86.5	95.5	101.2	107.8	89.6	92.4	102.3	89.6	100.2
February	104.4	89.5	101.0	152.0	95.6	99.8	92.5	85.9	94.0	100.2	106.7	88.0	94.5	104.0	91.0	98.4
March	105.1	90.1	98.1	146.9	97.2	99.8	92.2	85.3	93.5	101.1	107.4	89.0	95.8	104.0	91.8	99.4
April	107.4	90.2	95.4	146.4	96.8	99.9	91.2	85.3	92.8	99.9	107.7	89.5	96.8	103.6	92.7	99.5
May	109.9	90.8	94.8	146.7	95.8	97.9	91.7	85.0	91.7	99.9	106.5	88.6	97.7	104.6	94.0	99.7
June	111.8	91.3	94.1	142.4	95.2	98.6	91.2	84.2	91.4	102.7	105.7	89.4	96.5	104.1	96.6	98.5
July	113.9	91.4	91.2	137.4	95.2	99.6	90.6	84.8	90.9	103.9	105.7	89.2	95.5	104.5	99.6	98.7
August	114.7	91.7	91.6	136.2	94.9	99.0	91.9	84.6	90.6	103.3	105.3	88.6	95.7	104.4	100.6	97.7

Euro-currency market size

based on foreign-currency liabilities and claims of banks in major European countries, the Bahamas, Bahrain, Cayman Islands, Panama, Canada, Japan, Hong Kong, and Singapore billions of dollars (rounded to nearest $5 billion), at end of period

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
											Mar[r]
Estimated size											
Gross	150	205	310	390	480	590	725	930	1 190	1 470	1 520
Liabilities to nonbanks	30	35	55	75	80	100	125	170	230	270	310
Liabilities to central banks	15	25	40	60	70	85	110	115	165	190	185
Liabilities to other banks[a]	105	145	215	255	330	405	490	645	795	1 010	1 025
Net	85	110	160	215	250	310	380	485	600	735	750
Claims on nonbanks	35	45	65	100	115	150	195	245	295	365	375
Claims on central banks and on banks outside market area[b]	35	45	75	95	115	135	155	195	245	295	300
Conversions of Euro funds into domestic currencies by banks in market area[c]	15	20	20	20	20	25	30	45	60	75	75
Euro-dollars as % of gross liabilities in all Euro-currencies	76	78	73	77	78	79	76	74	72	76	77

a Includes unallocated liabilities
b Includes unallocated claims
c In European market area only
r revised
p preliminary

Euro-currency deposit rates

prime banks' bid rates in London, at or near end of month

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug
Euro-dollar:											
overnight	7.12	10.62	14.00	19.25	15.75	15.00	17.17	17.62	19.12	19.50	17.00
7-day fixed	6.31	10.62	14.00	19.75	15.50	14.37	16.00	17.50	18.50	18.50	17.87
one month	6.87	11.00	14.37	19.12	16.81	14.81	17.75	17.87	18.12	18.68	18.00
three months	7.19	11.69	14.44	17.62	16.62	14.81	16.87	17.75	17.81	18.68	18.44
six months	7.50	12.31	14.44	16.75	16.75	14.81	17.00	16.94	17.25	18.68	18.56
twelve months	7.67	12.00	12.87	14.87	16.06	14.81	16.31	16.12	16.31	17.62	17.81
Euro-mark:											
one month	2.19	3.19	8.50	8.87	14.87	12.31	12.12	12.25	12.25	12.06	12.18
three months	2.50	3.31	8.56	8.87	14.25	12.31	12.44	12.68	12.37	12.44	12.44
six months	2.81	3.69	8.56	8.87	13.37	12.00	12.44	12.68	12.37	12.56	12.68
twelve months	3.06	3.81	8.12	8.93	12.75	11.43	12.00	12.68	12.31	12.44	12.44
Euro-Swiss franc:											
one month	1.31	—.06	5.19	6.00	8.37	7.50	9.50	9.62	9.37	8.56	8.44
three months	1.37	0.00	5.75	6.00	8.37	7.62	9.50	10.00	9.87	9.25	8.87
six months	1.87	0.12	5.87	5.75	8.37	7.62	9.50	10.12	9.87	9.62	9.31
twelve months	2.25	0.62	5.56	5.50	7.62	7.62	9.50	9.37	9.12	9.06	8.75
Euro-sterling:											
one month	6.50	12.00	16.75	14.75	13.75	12.50	12.37	11.87	11.81	14.25	13.50
three months	6.62	12.62	16.75	14.75	12.75	12.50	12.37	12.37	12.50	14.62	13.87
six months	7.12	13.25	16.75	14.25	12.12	12.37	12.37	12.75	12.81	14.62	14.00
twelve months	7.37	13.00	15.25	14.00	12.00	12.18	12.37	12.87	13.12	14.50	14.00
Euro-French franc:											
one month	12.25	10.50	13.87	11.12	11.75	12.00	13.12	22.50	26.00	21.50	31.00
three months	13.25	9.87	14.00	11.75	12.87	12.37	13.50	19.50	23.00	21.50	27.50
six months	14.00	9.87	14.12	12.25	13.00	12.50	13.62	18.50	21.00	21.25	25.00
twelve months	13.25	10.25	13.75	12.87	13.00	13.00	13.62	17.00	19.00	19.50	22.00
Euro-yen:											
one month	0.62	—.69	7.62	9.12	8.62	7.75	6.62	7.12	7.00	6.75	7.12
three months	1.81	0.62	8.31	9.25	8.62	7.62	7.37	7.75	7.50	7.12	7.50
six months	2.75	1.87	8.62	9.62	8.37	7.75	7.37	7.87	7.87	7.37	7.50
twelve months	3.25	2.19	7.94	9.37	8.37	7.81	7.37	8.25	7.87	7.87	7.87

Euro-currency bank credits

publicly-announced in period, in millions of dollars

	1978	1979	1980	1981			Jan-Sep	
				Jul[r]	Aug[r]	Sep[p]	1981	1980
Industrial countries	**28 952**	**27 248**	**39 100**	**47 542**	**1 893**	**4 136**	**69 581**	**23 122**
Australia	212	941	2 475	—	—	300	667	1 006
Canada	5 705	1 845	1 743	3 300	—	50	3 690	656
Denmark	2 242	1 205	1 720	101	162	—	1 189	1 348
Finland	550	92	1 040	115	—	—	376	1 040
France	1 914	2 955	1 745	702	—	—	2 712	1 561
Greece	508	1 009	1 333	220	—	—	844	1 219
Ireland	616	687	237	90	—	200	752	111
Italy	2 485	3 708	6 268	120	791	18	4 340	4 642
Norway	1 517	935	685	260	—	—	427	410
Spain	2 426	4 184	5 457	60	238	13	2 664	2 958
Sweden	1 872	1 263	1 370	85	—	—	1 565	1 208
United Kingdom	3 898	795	1 470	122	—	150	542	1 098
United States	1 206	2 348	6 719	42 217	470	3 090	47 097	1 858
Others[a]	3 801	5 281	6 838	150	232	315	2 716	4 007
Developing countries	**37 290**	**47 964**	**35 054**	**3 474**	**5 108**	**1 571**	**31 828**	**24 578**
Non-OPEC countries	26 669	35 225	24 009	2 269	3 871	948	24 648	15 806
Argentina	1 461	2 965	2 506	—	652	110	1 749	1 665
Brazil	5 634	6 278	4 158	666	582	147	3 945	2 378
Chile	1 045	867	1 322	45	587	151	1 822	753
Korea	2 651	3 258	1 917	311	133	126	1 998	1 198
Malaysia	858	1 168	—	—	140	—	725	—
Mexico	7 250	8 243	5 971	641	649	100	6 364	4 441
Morocco	305	499	420	—	—	—	542	249
Peru	—	596	480	174	100	12	1 107	335
Philippines	2 073	2 067	1 056	—	100	—	824	541
Taiwan	254	1 063	314	—	320	—	921	275
Other[b]	4 838	8 221	5 865	432	608	302	4 651	3 972
OPEC countries	10 621	12 739	11 045	1 205	1 237	623	7 180	8 772
Algeria	2 576	1 906	40	—	—	—	—	40
Indonesia	1 118	1 061	1 435	—	—	300	605	859
Nigeria	825	1 373	1 330	442	48	40	1 392	613
United Arab Emirates	726	401	101	55	300	—	363	59
Venezuela	2 054	6 830	6 715	408	829	143	3 789	5 924
Other	3 322	1 168	1 424	300	60	140	1 031	1 277
Communist countries	**3 767**	**7 325**	**2 809**	**99**	**90**	—	**1 301**	**1 886**
China	—	3 395	181	50	—	—	50	139
East Germany	642	796	303	—	—	—	400	122
Hungary	700	260	550	—	—	—	550	249
Poland	374	849	800	—	—	—	—	799
Other[c]	2 051	2 025	975	49	90	—	301	577
International organizations	**160**	**275**	**429**	—	—	—	**70**	**409**
TOTAL	**70 169**	**82 812**	**77 392**	**51 115**	**7 091**	**5 707**	**102 780**	**49 995**

a includes multi-national organizations *b* includes regional development organizations *c* includes COMECON institutions *p* preliminary
r revised

International bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug
U.S. companies:											
U.S. dollar	7.95	8.55	10.13	11.76	12.17	12.46	12.51	12.64	12.32	12.67	13.33
Swiss franc	5.31	5.70	6.61	7.27	7.26	7.42	7.46	7.55	7.31	7.36	7.61
European companies:											
U.S. dollar	8.42	9.21	10.93	12.42	13.06	12.94	12.99	13.81	13.85	13.99	14.44
German mark	6.80	6.84	7.55	8.79	9.58	9.16	9.18	9.71	9.71	9.83	9.91
Governments:											
U.S. dollar	8.42	9.12	10.66	11.83	12.37	12.37	12.43	12.92	12.70	12.89	13.19

New international bond issues

new issues in period, in millions of dollars

	1978	1979	1980	1981			Jan-Sep	
				Julr	Augr	Sepp	1981	1980
By type:								
Euro-bonds, total	**14 125**	**18 726**	**23 970**	**2 505**	**2 477**	**2 199**	**19 858**	**17 613**
by category of borrower								
U.S. companies	1 122	2 872	4 107	477	555	450	4 032	2 746
Foreign companies	4 540	7 183	9 032	1 398	832	1 196	8 305	6 289
State enterprises	3 291	4 524	5 839	305	717	292	4 298	4 473
Governments	3 643	2 433	3 045	325	83	60	1 392	2 549
International organizations	1 529	1 714	1 947	—	290	201	1 831	1 556
by currency of denomination								
U.S. dollar	7 290	12 565	16 427	2 337	2 150	1 830	16 881	11 812
German mark	5 251	3 626	3 607	33	76	161	467	2 844
Dutch guilder	394	531	1 043	—	—	58	422	815
Canadian dollar	—	425	279	—	16	92	150	279
European unit of account	165	253	65	42	40	—	157	37
Other	1 025	1 326	2 549	93	195	58	1 781	1 826
Foreign bonds outside the United States, total	**14 359**	**17 749**	**14 521**	**1 403**	**815**	**1 089**	**9 335**	**10 787**
by category of borrower								
U.S. companies	245	217	307	11	69	50	400	219
Foreign companies	2 110	3 463	3 157	568	364	313	2 751	1 937
State enterprises	3 163	3 284	2 830	366	115	80	2 319	1 981
Governments	5 771	7 663	4 086	135	114	406	1 731	3 612
International organizations	3 070	3 122	4 141	323	153	240	2 134	3 038
by currency of denomination								
German mark	3 789	5 379	4 839	144	39	—	642	4 069
Swiss franc	5 698	9 777	7 617	902	538	648	5 798	5 357
Dutch guilder	385	75	259	74	—	146	399	184
Japanese yen	3 826	1 833	1 088	217	215	110	1 676	781
Other	671	685	718	66	23	185	820	396
Foreign bonds in the United States, total	**5 795**	**4 515**	**3 429**	**746**	**251**	**510**	**4 782**	**2 004**
by category of borrower								
Canadian entities	3 142	2 193	2 136	550	193	500	3 699	1 145
International organizations	459	1 100	550	—	—	—	—	350
Other	2 194	1 222	743	196	58	10	1 083	509
By country of borrower:								
Industrial countries	**24 964**	**31 886**	**32 732**	**3 881**	**2 639**	**3 135**	**26 893**	**23 576**
Australia	1 218	593	539	130	—	—	345	470
Austria	1 027	1 218	1 859	211	86	134	1 078	1 497
Canada	4 764	4 197	3 797	1 045	778	887	6 827	2 508
Denmark	1 017	752	1 125	247	—	—	461	956
Finland	952	699	392	—	—	74	428	364
France	1 286	2 106	2 820	273	100	105	2 341	1 786
Japan	3 467	5 775	5 309	558	821	842	5 099	3 405
Netherlands	250	832	1 585	69	46	88	388	1 179
Norway	2 751	1 954	892	32	—	110	331	689
Sweden	876	1 530	3 244	43	46	70	1 232	2 351
United Kingdom	1 365	1 181	1 733	250	—	54	693	1 339
United States	2 973	6 767	5 587	488	624	500	4 432	4 137
Developing countries	**4 227**	**3 093**	**2 485**	**450**	**461**	**222**	**3 087**	**1 819**
Non-OPEC countries	2 684	2 675	1 942	450	461	197	2 751	1 356
Brazil	843	930	349	14	—	—	60	348
Mexico	568	363	544	301	378	137	1 943	313
Philippines	170	175	70	—	—	—	30	70
OPEC countries	1 543	418	543	—	—	25	336	462
Algeria	721	208	—	—	—	—	—	—
Venezuela	588	55	398	—	—	—	221	317
Communist countries	**30**	**75**	**65**	—	—	—	**30**	**65**
Hungary	—	—	65	—	—	—	—	65
International organizations	**5 058**	**5 936**	**6 638**	**323**	**443**	**441**	**3 965**	**4 944**
TOTAL	**34 279**	**40 990**	**41 920**	**4 654**	**3 543**	**3 798**	**33 975**	**30 404**

Central bank discount rates

	1977	1978	1979	1980		1981		Current	
	end Dec	end Dec	end Dec	end Sep	end Dec	end Mar	end Jun	Sep 23 1981	effective since
United States	6.00	9.50	12.00	11.00	13.00	13.00	14.00	14.00	May 5, 81
Canada	7.50	10.75	14.00	11.20	17.36	16.69	19.08	19.67	Sep 17, 81
Japan	4.25	3.50	6.25	8.25	7.25	6.25	6.25	6.25	Mar 18, 81
United Kingdom	7.00	12.50	17.00	16.00	14.00	12.00	12.00	14.25*	Sep 23, 81
Belgium	9.00	6.00	10.50	12.00	12.00	16.00	13.00	13.00	May 29, 81
France	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	3.00	3.00	6.00	7.50	7.50	7.50	7.50	7.50	May 2, 80
Italy	11.50	10.50	15.00	16.50	16.50	19.00	19.00	19.00	Mar 23, 81
Netherlands	4.50	6.50	9.50	8.50	8.00	9.00	9.00	9.00	Mar 3, 81
Austria	5.50	4.50	3.75	6.75	6.75	6.75	6.75	6.75	Mar 21, 80
Denmark	9.00	8.00	11.00	12.00	11.00	11.00	11.00	11.00	Oct 27, 80
Finland	8.25	7.25	8.50	9.25	9.25	9.25	9.25	9.25	Feb 1, 80
Ireland	6.75	11.85	16.40	13.50	12.75	12.75	14.40	15.00	Jul 10, 81
Norway	6.00	7.00	9.00	9.00	9.00	9.00	9.00	9.00	Nov 30, 79
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	Jul 26, 77
Sweden	8.00	6.50	9.00	10.00	10.00	12.00	12.00	12.00	Jan 20, 81
Switzerland	1.50	1.00	2.00	3.00	3.00	4.00	5.00	6.00	Sep 2, 81
Argentina	165.27	108.19	89.90	69.64	87.01	109.34	143.39	139.40	Aug, 81
Korea	14.00	14.50	14.50	17.50	15.50	15.50	15.50	15.50	Nov 11, 80
New Zealand	10.00	10.50	13.00	14.00	14.00	14.00	14.00	14.00	Jul, 80
Philippines	6.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	May 19, 78
Singapore	3.50	4.50	6.75	8.75	10.50	11.00	10.00	10.75	Jul 10, 81
South Africa	9.00	8.50	7.00	7.00	7.00	8.00	10.50	12.50	Jul 21, 81
Venezuela	7.00	7.50	11.00	10.00	13.00	13.00	12.00	14.00	Aug 26, 81

*Announcement of minimum lending rate (MLR) discontinued August 20, 1981.
New series, Bank of England's intervention rate for 15-33 day eligible bank bills.

Day-to-day money rates

monthly averages

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug
United States	6.56	10.03	13.78	18.90	15.93	14.70	15.50	18.52	19.01	19.02	18.03
Canada	6.84	9.44	13.83	15.61	16.58	16.90	16.79	17.17	18.69	18.85	21.41
Japan	5.01	4.57	8.02	9.49	8.60	8.04	7.19	7.06	7.12	7.25	7.20
Australia	9.96	8.40	7.84	9.51	10.35	11.11	11.83	12.07	13.04	13.44	13.09
United Kingdom	4.81	10.00	14.87	13.00	12.19	11.06	10.15	9.95	9.62	10.63	11.37
Belgium	7.48	6.73	10.65	9.68	9.18	10.13	16.51	13.00	9.58	11.07	12.02
France	9.30	6.67	12.17	10.87	10.91	11.72	12.23	16.03	19.93	18.49	17.50
Germany	3.24	3.61	9.15	9.13	10.57	11.25	11.27	11.79	11.93	12.00	n.a.
Italy	11.37	11.00	16.00	17.50	17.37	19.62	19.62	19.75	20.00	20.00	20.12
Netherlands	5.27	10.00	15.67	8.37	9.12	9.75	9.50	10.88	11.13	12.50	12.12
Austria	9.25	5.37	8.50	11.50	9.00	11.00	12.00	9.00	12.25	12.00	12.25
Finland	22.99	9.29	13.53	12.50	12.50	11.72	10.57	11.00	11.00	11.00	11.45
Ireland	8.00	12.12	16.88	13.31	13.38	13.12	15.38	14.12	13.81	15.50	17.38
Spain	7.22	16.75	9.61	16.74	12.50	11.98	13.89	16.80	18.53	16.68	17.42
Sweden	8.91	6.26	11.99	11.41	16.97	15.40	14.20	14.96	14.56	13.54	13.95
Switzerland	0.85	0.00	1.25	5.75	3.50	4.50	5.00	3.62	3.00	2.37	2.62
Argentina	n.a.	n.a.	78.22	70.84	92.07	133.08	96.66	108.76	131.19	130.32	114.89
Brazil	28.44	35.64	32.28	49.68	54.48	56.64	49.32	65.16	54.12	60.36	68.16
Hong Kong	4.87	9.67	14.19	14.05	18.00	16.85	16.43	16.67	16.12	16.64	14.04
Korea	14.40	15.00	15.00	14.82	14.82	14.82	14.82	14.82	14.82	14.82	14.82
Philippines	14.44	13.22	16.25	15.70	14.43	17.34	15.59	16.61	16.12	11.53	n.a.
Singapore	3.59	4.96	10.17	10.23	12.73	9.73	6.76	7.92	13.08	15.38	n.a.
South Africa	7.65	7.11	3.81	5.60	7.06	7.26	7.49	8.51	8.78	10.06	10.77
Euro-dollars	6.94	10.80	14.41	19.22	16.14	14.57	16.36	18.19	18.75	19.13	18.66

Treasury bill rates

bond-equivalent yields, at or near end of month

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug
United States	6.33	9.42	12.39	14.87	14.80	13.55	15.51	16.00	14.75	15.51	16.18
Canada	7.17	10.46	13.66	17.01	16.83	16.44	17.35	18.43	18.83	20.29	20.82
Japan	4.15	3.39	5.68	5.93	5.93	5.93	5.68	5.68	5.68	5.68	5.68
Australia	8.35	8.35	9.31	12.17	12.68	12.72	13.78	13.22	13.32	13.99	14.11
United Kingdom	6.42	12.01	16.45	13.45	11.93	11.87	11.57	11.78	12.24	14.31	13.63
Belgium	9.25	9.25	14.40	12.75	13.25	15.00	17.00	16.75	15.00	16.25	15.75
Ireland	6.74	11.83	16.37	12.84	12.84	12.70	13.85	14.65	14.72	15.42	16.20
Italy	12.81	12.81	15.62	17.02	17.02	19.01	18.99	19.66	21.36	21.36	21.24
Netherlands	8.00	9.50	12.75	8.00	8.75	9.25	9.75	11.75	12.00	15.25	13.87
Spain	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13.25	17.00	17.00	16.00	16.25
Sweden	9.21	5.84	9.74	12.87	16.85	15.73	15.73	15.77	13.97	12.79	12.79
Argentina	109.06	82.55	71.04	66.19	90.06	107.97	86.79	104.34	121.03	122.48	114.02
Brazil	38.08	41.21	27.84	76.84	73.58	70.46	71.33	71.88	72.98	72.64	72.18
Korea	16.88	17.01	19.53	16.35	18.98	18.98	18.98	18.16	16.00	16.00	17.57
Mexico	n.a.	12.75	17.89	27.73	28.76	28.55	28.36	28.08	28.34	n.a.	n.a.
New Zealand	7.50	10.50	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25
Philippines	10.04	12.08	12.63	12.74	12.65	12.69	12.76	12.76	13.20	13.51	n.a.
Singapore	3.17	4.01	6.18	6.77	6.84	6.60	6.58	6.57	6.34	6.54	n.a.
South Africa	8.17	7.61	4.30	6.31	7.59	7.82	7.89	9.08	10.26	11.58	11.61

Representative money-market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money-market instruments, other than Treasury bills, at or near end of month

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug
United States	6.84	10.57	13.70	17.62	15.48	14.25	16.80	16.94	17.07	17.62	17.48
Canada	7.25	10.62	14.15	17.50	16.85	17.05	17.55	19.00	19.35	21.10	22.05
Japan	5.89	4.64	8.01	9.80	8.46	7.34	6.76	7.49	7.20	7.12	7.30
Australia	9.75	9.10	10.30	13.00	14.00	15.10	15.75	15.50	16.00	16.00	16.00
United Kingdom	6.50	12.50	17.00	14.75	12.50	12.50	12.37	12.44	12.56	14.69	13.94
Belgium	9.50	9.25	14.45	13.10	13.00	14.00	17.00	16.85	15.25	16.50	16.00
France	9.19	6.44	12.62	11.56	13.50	12.75	13.37	18.25	18.25	17.12	17.75
Germany	3.60	3.70	8.70	10.20	14.50	13.30	12.90	13.30	12.90	12.90	12.80
Ireland	6.75	13.00	18.12	13.62	14.78	14.00	15.37	15.94	15.88	17.50	17.37
Italy	11.75	11.37	17.12	17.37	17.50	19.75	19.75	20.00	20.50	20.37	20.75
Netherlands	6.25	10.50	13.00	9.37	11.25	10.37	11.25	12.25	11.87	13.37	13.62
Spain	12.06	22.80	13.20	17.40	15.00	13.20	13.79	16.28	17.02	16.12	16.09
Switzerland	2.02	0.50	6.12	7.50	8.50	9.37	10.00	10.50	10.37	9.62	9.12
Hong Kong	5.73	11.82	14.37	17.69	16.86	16.27	16.45	17.55	17.00	17.15	17.51
Korea	16.88	17.01	19.53	16.35	16.35	16.35	15.60	15.70	15.70	15.70	15.70
New Zealand	11.87	12.00	16.00	14.25	14.80	15.60	14.70	14.50	13.90	14.90	16.15
Philippines	11.96	11.48	10.41	15.01	16.86	16.63	16.67	17.50	16.66	15.16	n.a.
Singapore	4.81	7.38	10.12	14.12	13.69	11.69	10.06	12.44	12.31	14.44	n.a.
South Africa	9.00	7.85	4.72	7.12	9.73	9.89	9.84	12.37	15.05	16.12	15.31

Commercial bank deposit rates

at or near end of month

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug
United States	6.80	10.90	13.55	16.25	14.75	13.50	16.75	16.75	17.15	17.75	17.50
Canada	7.25	10.45	14.05	17.00	17.15	16.85	17.50	18.50	19.30	21.05	21.95
Japan	3.25	2.50	8.37	9.00	8.25	7.25	7.35	7.40	7.60	7.55	7.50
Australia	9.50	8.50	10.25	12.71	14.14	14.95	16.17	15.43	15.23	15.54	15.63
United Kingdom	6.37	12.25	16.81	14.87	12.37	12.44	12.41	12.50	12.56	14.56	13.87
Belgium	9.50	9.87	14.50	12.63	13.50	15.50	16.75	16.50	15.25	16.00	15.63
France	9.00	6.50	12.50	11.25	12.00	13.00	15.00	16.00	17.00	16.50	10.50
Germany	3.40	3.50	7.75	8.00	13.50	12.50	11.75	12.25	12.00	12.00	12.00
Italy	17.00	12.50	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25
Netherlands	7.00	11.62	13.50	9.50	11.50	10.50	11.50	12.25	11.87	13.62	13.75
Austria	9.00	6.75	8.50	11.25	9.75	11.50	11.75	12.50	12.50	12.37	12.50
Denmark	8.00	7.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Finland	4.25	3.25	4.25	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Ireland	6.87	12.75	17.87	13.62	14.62	13.50	15.12	15.75	15.63	17.00	17.25
Norway	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Spain	4.50	4.50	4.50	4.50	4.50	4.50	12.00	13.00	13.00	13.00	13.25
Sweden	7.75	6.25	8.75	9.75	11.25	11.25	11.25	11.25	11.25	11.25	11.25
Switzerland	1.12	0.12	4.75	7.50	8.50	7.25	8.50	9.00	9.00	8.50	8.75
Argentina	n.a.	86.63	72.64	72.00	97.00	130.00	87.00	123.00	150.00	130.00	123.78
Brazil	39.60	46.80	45.00	69.48	72.84	73.44	75.36	76.20	75.48	73.92	72.24
Hong Kong	1.75	4.50	9.25	13.00	13.25	13.00	13.00	13.00	13.00	13.00	13.00
Korea	13.20	15.00	15.00	14.82	14.82	14.82	14.82	14.82	14.82	14.82	14.82
Mexico	11.00	12.00	16.75	26.15	27.00	26.65	26.70	27.25	28.35	n.a.	n.a.
New Zealand	11.00	12.00	15.90	13.50	14.00	14.50	14.30	14.60	14.00	14.80	15.00
Philippines	8.50	8.50	10.50	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Singapore	5.31	7.31	10.31	13.19	12.19	10.75	9.12	11.88	11.31	13.12	n.a.
South Africa	8.70	7.30	4.82	7.87	10.75	10.27	10.87	13.37	15.75	16.37	15.00
Venezuela	7.00	7.25	15.00	16.00	16.00	14.00	14.00	14.00	14.00	14.00	16.00

Commercial bank lending rates to prime borrowers

at or near end of month

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug
United States	7.75	11.75	15.25	21.50	19.00	17.00	18.00	20.50	20.00	20.50	20.50
Canada	8.25	11.50	15.00	18.25	18.25	17.75	18.25	19.50	20.00	21.75	22.75
Japan	5.47	4.50	6.51	8.16	7.86	7.74	7.52	7.33	7.10	7.10	7.20
Australia	11.50	11.00	10.75	13.50	13.50	14.25	15.00	15.00	15.75	15.75	15.75
United Kingdom	8.00	13.50	18.00	15.00	15.00	13.00	13.00	13.00	13.00	13.00	13.00
Belgium	10.00	10.00	15.25	15.75	15.25	16.50	19.25	18.75	17.50	18.00	18.00
France	10.30	9.80	12.50	12.25	13.00	13.75	13.75	17.00	15.90	15.30	15.30
Germany	6.00	5.50	9.75	11.50	12.00	13.75	13.75	14.25	14.25	14.25	14.25
Italy	16.00	15.00	19.50	20.50	21.00	22.50	22.50	21.50	21.50	21.50	21.50
Netherlands	7.00	12.00	15.00	10.75	10.75	11.25	11.25	13.25	13.25	14.75	15.00
Austria	9.75	8.75	8.50	12.50	12.50	12.50	12.50	13.00	13.50	13.50	13.50
Denmark	12.50	10.00	13.75	13.75	13.75	13.75	13.75	13.75	14.00	14.50	14.50
Finland	8.85	7.87	9.06	9.83	9.84	9.85	9.85	9.86	9.85	9.85	n.a.
Ireland	8.25	13.75	16.00	14.50	14.50	14.50	14.50	15.50	15.50	15.50	17.25
Norway	8.33	11.00	11.00	12.50	12.50	12.50	12.50	13.75	13.75	13.75	13.75
Spain	9.00	9.00	9.00	18.50	16.92	15.46	15.11	17.25	18.25	17.81	17.40
Sweden	10.25	8.50	10.75	11.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75
Switzerland	5.75	5.00	5.00	5.75	6.00	6.50	7.00	7.00	7.00	7.00	7.00
Argentina	152.08	86.75	80.00	77.00	114.00	146.00	90.00	141.00	181.00	140.00	123.00
Brazil	52.05	61.70	57.00	88.00	133.75	133.75	133.75	127.38	129.50	127.63	120.25
Hong Kong	4.75	8.75	14.50	17.00	17.00	17.00	17.00	17.00	17.00	18.00	18.00
Korea	15.00	18.50	18.50	19.50	19.50	19.50	19.50	19.50	19.50	19.50	19.50
Mexico	17.00	17.50	19.00	24.25	25.98	26.59	26.91	27.22	29.66	28.42	n.a.
New Zealand	8.50	9.75	11.75	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Philippines	14.00	14.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	18.00	18.00
Singapore	7.02	7.65	9.50	13.60	14.30	13.68	12.72	12.55	13.40	14.32	n.a.
South Africa	12.50	11.50	9.50	9.50	11.00	11.50	11.50	13.00	14.00	16.00	16.00
Venezuela	9.50	10.25	13.00	15.00	15.00	13.00	13.00	13.00	13.00	13.00	17.00

Domestic government bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug
United States	7.97	9.00	10.20	11.46	13.16	13.21	14.13	13.52	13.44	14.24	14.82
Canada	8.77	9.68	11.32	12.69	13.38	13.48	15.07	14.96	15.03	17.07	16.77
Japan	6.40	6.40	8.63	9.04	8.89	8.67	8.84	9.23	9.20	9.31	9.36
Australia	9.50	8.90	10.45	13.00	13.10	13.10	13.10	13.10	13.20	14.30	15.00
United Kingdom	10.53	12.75	13.83	13.05	13.36	12.86	13.18	13.50	13.98	14.45	14.47
Belgium	8.76	8.80	11.13	13.04	13.44	13.57	13.52	13.85	14.18	13.97	14.06
France	11.07	9.94	12.59	14.31	15.05	14.98	14.95	17.25	17.35	17.11	17.03
Germany	5.52	6.65	7.91	9.19	10.38	9.97	10.12	10.68	10.30	10.45	10.72
Italy	10.82	10.89	11.28	12.12	12.88	14.46	14.53	14.27	13.81	14.09	14.18
Netherlands	8.11	8.48	9.29	10.48	10.96	11.38	11.29	11.89	11.43	11.57	8.95
Austria	9.00	7.91	8.20	9.62	10.06	10.33	10.18	10.36	10.78	10.87	n.a.
Denmark	16.83	17.27	18.28	19.98	19.29	19.67	20.26	20.59	20.75	21.32	21.28
Finland	10.25	9.19	9.58	10.42	10.92	10.96	10.97	10.96	10.96	10.96	10.96
Ireland	11.30	13.44	16.64	15.63	16.01	16.12	16.57	16.99	17.31	17.44	n.a.
Norway	8.37	8.19	10.04	10.44	11.50	11.57	11.65	11.65	11.65	11.65	12.58
Spain	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13.00	12.75	12.75	12.75	12.75
Sweden	9.84	10.09	11.22	12.61	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Switzerland	3.75	3.03	4.20	4.63	5.20	5.40	5.79	5.85	5.59	5.52	5.84
Argentina	181.65	112.18	47.94	36.84	42.99	66.43	65.64	144.24	108.79	184.60	148.16
New Zealand	10.00	10.02	12.98	12.99	12.97	12.88	12.85	12.85	12.90	n.a.	n.a.
Philippines	13.40	13.40	13.20	13.40	13.40	13.40	13.42	13.41	13.41	13.41	13.41
South Africa	10.75	9.85	9.44	11.81	12.73	12.75	12.69	13.03	13.05	13.07	13.12
Venezuela	7.24	7.24	7.29	7.39	7.40	7.30	10.00	10.00	10.00	11.00	12.00

Domestic corporate bond yields

long-term issues, at or near end of month

	1977	1978	1979	1980	1981						
	Dec	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug
United States	8.30	9.25	10.75	13.00	14.13	14.00	15.00	14.25	14.63	15.75	16.00
Canada	9.71	10.34	12.07	13.62	14.34	14.41	16.03	15.94	15.93	17.93	17.95
Japan	6.68	6.94	8.34	8.60	8.25	8.15	7.95	8.09	8.22	7.90	7.90
Australia	11.00	10.25	11.65	14.25	14.10	14.25	14.50	15.00	15.25	16.00	16.50
United Kingdom	11.88	13.53	14.96	14.21	14.14	14.35	14.44	14.94	15.31	16.02	15.97
France	12.09	10.27	12.92	15.23	15.13	15.39	15.39	15.35	15.37	18.20	17.80
Germany	5.92	6.80	8.20	9.50	10.00	10.90	10.90	11.40	11.70	11.70	11.80
Italy	10.71	10.12	10.22	12.99	13.05	16.82	17.01	19.84	20.02	21.50	21.97
Netherlands	7.90	8.62	9.95	10.71	10.77	11.21	11.07	11.76	11.66	11.40	12.04
Norway	8.59	8.37	10.53	11.24	12.07	12.36	12.76	12.76	12.76	12.76	13.91
Spain	11.58	13.49	14.20	14.82	14.36	14.55	14.73	14.51	14.51	n.a.	n.a.
Sweden	9.83	10.03	10.21	11.95	13.46	13.56	13.63	13.66	13.65	13.65	13.70
Switzerland	4.96	4.85	5.53	5.63	5.93	6.08	6.08	6.44	6.33	6.09	6.98
Korea	19.60	24.00	32.50	26.30	24.70	23.00	22.30	22.30	22.30	22.30	22.60
Mexico	17.56	20.37	21.99	28.03	30.90	30.20	30.97	28.92	30.71	31.63	38.37
Venezuela	10.39	12.43	14.55	16.15	16.20	16.00	16.25	16.30	16.50	17.00	18.00

Key to data in tables

I. International markets

Definitions

An *international bond* issue is one sold outside the country of the borrower. It may be either a Euro-bond issue or a foreign bond issue.

A *Euro-bond* issue is one underwritten by an international syndicate and sold principally in countries other than the country of the currency in which the issue is denominated.

A *foreign bond* issue is one underwritten by a syndicate composed of members from one country, sold principally in that country, and denominated in the currency of that country.

A *Euro-currency bank credit* is a loan in a currency which is not native to the country in which the bank office making the loan is located.

Data on *new international bond issue volume* include all publicly announced issues with an original maturity of three years or more, whether publicly or privately placed, but exclude those where the investor is a central bank, monetary authority, or government.

Data on *new Euro-currency bank credit volume* include all publicly announced loans with an original maturity of more than one year. A loan is included in the period in which the lending banks make a commitment covering the amount and terms of the loan to the borrower.

Categories of borrower

U.S. companies include both parent companies and their financing affiliates, either domestic or foreign.

Other companies include private companies domiciled outside the United States and their affiliates.

State enterprises include public agencies.

Governments include central and local governments.

Country of borrower

The country of the borrower is the residence of the borrowing entity, except where the entity is a financing vehicle, in which case the residence of the parent company and or guarantor is used.

International bond yields

Yields are calculated to the nearest day of maturity. Interest on bonds with annual coupons is discounted semiannually for comparability in computation of yield.

The yield indices are simple arithmetic averages of end-of-month secondary market yields for groups of selected straight-debt securities. Yield indices for six categories of bonds have been calculated according to borrower and currency. They are based on issues of good-quality, well-known borrowers. Occasionally the individual issues in each category are changed.

The number of issues represented in each of the indices is as follows:

Long-Term, U.S. companies, U.S. dollar — —ten Euro-bond issues.

Long-term, U.S. companies, Swiss franc — four foreign bond issues.

Long-term, European companies, U.S. dollar — ten Euro-bond issues.

Long-term, European companies, German mark — ten Euro-bond issues.

Long-term, governments, U.S. dollar — six Euro-bond issues (governments of Italy, Denmark, and France).

Euro-currency deposit rates

All data are prime banks' bid rates for deposits in London. Offer rates commonly used as a basis for Euro-dollar lending are generally .125% above bid rates.

II. Domestic markets

Day-to-day money rates

Argentina — 7-day interbank money.

Austria — day-to-day interbank rate.

Australia — approximate effective interest rate in the authorized short-term money market.

Belgium — Interbank call money.

Brazil — overnight financing of Treasury bills (LTN) until November 1978. New series as of December 1979, rates paid for federal funds.

Canada — chartered banks' day-to-day loans.

Finland — Bank of Finland call money.

France — interbank call money against private paper.

Germany — interbank call money.

Hong Kong — interbank 24-hour call rate.

Ireland — interbank call money.

Italy — interbank 48 hour call money.

Japan — Tokyo interbank call money, unconditional lenders rate.

Korea — call money.

Netherlands — open-market call money.

Philippines — interbank call money.

Singapore — interbank overnight money.

South Africa — National Finance Corporation call money.

Spain — day-to-day interbank rate.

Sweden — interbank call money.

Switzerland — call money.

United Kingdom — call money.

United States — effective Federal funds rate.

Euro-dollars — prime banks' bid rate for overnight money.

Treasury bill rates

Argentina — 28-day Treasury bills.

Australia — new issues of 13-week Treasury notes.

Belgium — 3-month Treasury certificates.

Brazil — 91-day Treasury bills (LTN).

Canada — 3-month Treasury bills at tender.

Ireland — 3-month Central Bank Exchequer bills.

Italy — 6-month Treasury bills.

Japan — 60- to 62-day noninterest-bearing discount government bills.

Korea — 3-month Treasury bills until May 1981. New series as of June 1981, 1-month Treasury bills sold by Central Bank.

Mexico — 3-month Federal Treasury bills.

Netherlands — 3-month Treasury bills.

New Zealand — 3-month Treasury bills.

Philippines — 91-day Treasury bills at tender.

Singapore — 91-day Treasury bills at tender.

South Africa — 3-month Treasury bills at tender.

Spain — 3-month Treasury bills.

Sweden — new issues of 3-month Treasury bills.

United Kingdom — 91-day Treasury bills at tender.

United States — 3-month Treasury bills.

Representative money-market rates

Australia — 3-month prime finance company paper.

Belgium — 4-month Fonds des Rentes certificates.

Canada — 3-month prime finance company paper.

France — 3-month interbank money against private paper.

Germany — 3-month interbank deposits.

Hong Kong — 3-month interbank deposits.

Ireland — 3-month interbank deposits.

Italy — 3-month interbank deposits.

Japan — 3-month repurchase agreements.

Korea — 3-month financial bill.

Netherlands — 3-month interbank deposits.

New Zealand — 90-day commercial bills.

Philippines — 90-day promissory notes.

Singapore — 3-month bank acceptances.

South Africa — 90-day bank acceptances.

Spain — 1-month interbank deposits.

Switzerland — 3-month interbank deposits.

United Kingdom — 3-month interbank deposits.

United States — 3-month prime industrial paper.

Commercial bank deposit rates

Argentina — nominal 30-day time deposits. Average of bank rates published by the Central Bank.

Austria — 3-month time deposits

Australia — 3-month certificates of deposit.

Belgium — special maximum rate for 3-month time deposits in large amounts.

Brazil — 6-month negotiable certificates of deposit of investment banks net of taxes.

Canada — 3-month time deposits.

Denmark — time deposits of 3-months' notice.

Finland — time deposits of six-month notice.

France — 3-month time deposits of FF. 1,000,000.

Germany — 3-month time deposits in large amounts.

Hong Kong — 3-month certificates of deposit. Rate set by the Hong Kong Exchange Banks' Association.

Key to data in tables — continued

Ireland — 3-month time deposits.

Italy — 3-month time deposits of Lit. 100 million or more.

Japan — 3-month time deposits until April 1979. New series as of May 1979, 90-day negotiable certificates of deposit issued by the Tokyo office of Morgan Guaranty Trust Company.

Korea — 3-month time deposits.

Mexico — 3-month certificates of deposit issued by financieras to corporations for amounts over Ps. 1 million. Higher rates available to individuals.

Netherlands — 3-month time deposits in large amounts.

New Zealand — 6-month transferable certificates of deposit.

Norway — 3-month time deposits. Higher rates may be negotiated for 12-month or more time deposits in large amounts.

Philippines — 3-month time deposits.

Singapore — 3-month certificates of deposit.

South Africa — negotiable certificates of deposit.

Spain — maximum legal rate for 3-month deposits until March 1981. New series as of April 1981, deposits over 6-months and less than 1-year for Pts. 1 million or more.

Sweden — deposits at 6-months' notice.

Switzerland — 3-month time deposits.

United Kingdom — 3-month time deposits.

United States — 3-month negotiable certificates of deposit issued by Morgan Guaranty Trust Company.

Venezuela — 6-month negotiable certificates of deposits for large amounts until December 1978. New series as of January 1979, similar rate for domestic depositors only.

Commercial bank lending rates to prime borrowers

Argentina — average rate on 30-day loans.

Austria — overdraft rate for prime borrowers, including commission.

Australia — approximate overdraft rate for prime borrowers.

Belgium — prime overdraft rate.

Brazil — weighted average investment bank lending rates.

Canada — prime rate.

Denmark — approximate rate for loans and advances to prime borrowers.

Finland — average rates on total commercial bank lending.

France — prime lending rate, excluding a commission of .05% per month on highest debit balance during the month.

Germany — approximate effective overdraft rate for prime borrowers.

Hong Kong — prime rate.

Ireland — AA corporate borrowing rate.

Italy — unsecured overdraft rate for prime borrowers.

Japan — average contracted interest rate for short-term loans of city banks. In addition, compensating balances may be required.

Korea — prime rate.

Mexico — base rate or average cost of money for banks determined monthly by the Banco de Mexico S.A.

Netherlands — overdraft rate for prime borrowers, including commission.

New Zealand — overdraft rate for prime borrowers.

Norway — overdraft rate, including a commission of .333% prior to July 1978, .25% thereafter, per quarter on the total line of credit.

Philippines — maximum legal rate, for unsecured loans exclusive of service fee.

Singapore — most common overdraft rate, major banks.

South Africa — unsecured overdraft rate for prime borrowers.

Spain — maximum legal rate for discounting commercial bills plus a commission of 1% per annum until December 1979. New series as of January 1980, preferential rate for 1-month loans calculated by the Bank of Spain.

Sweden — actual interest rate on 3-month loans to prime industrial borrowers.

Switzerland — unsecured overdraft rate for prime borrowers, excluding commission of .25% per quarter on average or highest outstanding debit balance in quarter.

United Kingdom — unsecured overdraft rate for prime borrowers.

United States — prime rate of Morgan Guaranty Trust Company. In addition, compensating balances are required.

Venezuela — representative rate for prime borrowers until December 1978. New series as of January 1979, similar rate for domestic prime borrowers only.

Domestic government bond yields

Argentina — 7% National Adjustable Bond, third series maturing in 1985, inflation adjusted by the Official Correction Index.

Austria — Austrian National Bank average yield on all outstanding government bonds.

Australia — 20-year government bonds.

Belgium — Belgian National Bank average yield on government bonds maturing in more than five years.

Canada — Bank of Canada average yield on all direct government bonds due or callable in 10 years or more.

Denmark — 10% government bond maturing 1983 until December 1977; 10% government bonds maturing 1986 until September 1980. New series as of October 1980, 12% serial bonds maturing 2001.

Finland — rate of interest at issue on central government bonds intended for public subscription, weighted by sales of bonds in the latter half of each month.

France — Institut National de la Statistique et des Etudes Economiques (INSEE) yield on public and semi-public sector bonds.

Germany — Frankfurter Allgemeine Zeitung (FAZ) 7% public authority bond average until September 1978. New series as of October 1978, FAZ 10-year public authority bond average.

Ireland — 15-year government bonds.

Italy — average of yields on six outstanding bonds of public-sector entities.

Japan — secondary market yield for the 6.1% due 1988 national government bond.

Netherlands — Central Bureau of Statistics (CBS) average yield on three latest 7% to 7.75% government bonds.

New Zealand — average yield on government bonds maturing after 10 years.

Norway — 5% government bond of 1996.

Philippines — Central Bank 5-year Certificate of Indebtedness, regular issue.

South Africa — 25-year government bonds.

Spain — 3- to 4-year government guaranteed bonds. Tax credit of 22% available to corporate and private buyers if held to maturity.

Sweden — 15-year government bonds.

Switzerland — Swiss Confederation bond average.

United Kingdom — F.T. (Financial Times) Actuaries 25-year government stock.

United States — Morgan Guaranty 20-year U.S. Government Bond Index.

Venezuela — Banco Central average yield on public-sector bond issues.

Domestic corporate bond yields

Australia — long-term secured debentures, indicated by Australian United Corporation.

Belgium — Belgian National Bank average yield on private corporate bonds maturing in more than five years.

Canada — McLeod, Young, Weir Co. Ltd., average yield on ten industrial bonds.

France — INSEE tax-adjusted average yield on outstanding private corporate bonds.

Germany — FAZ 6% industrial bond average until September 1978. New series as of October 1978, Bundesbank average yield on industrial bonds

Italy — average of yields of four outstanding bonds of leading Italian industrial companies.

Japan — secondary market yield for NTT bond maturing March 1987.

Korea — average of yields on 3-year corporate bonds guaranteed by local banks.

Mexico — average of yields of six outstanding Telefonos de Mexico bonds.

Netherlands — CBS average yield on three 6% to 6.5% corporate bonds.

Norway — 5.75% Dalen Portland-Cement bond of 1969-1984.

Spain — average yield for a selected group of electricity companies.

Sweden — Central Satistical Bureau average yield on industrial bonds.

Switzerland — average yield on outstanding bonds of four leading Swiss companies.

United Kingdom — F.T. (Financial Times) Actuaries 20-year debentures and loans until February 1981. New series as of March 1981, F.T. Actuaries 25-year debentures and loans.

United States — Salomon Brothers index of new issue yields for Aa industrial bonds with five-year call protection.

Venezuela — average of yields on 15-year bond issues of Electricidad de Caracas.

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World Financial Markets

Morgan Guaranty Trust Company of New York

October 1981

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Table 1

Exchange rate changes from October 1, 1981 to October 23, 1981

percent vis-à-vis dollar and on a trade-weighted average basis

	Vis-à-vis dollar	Trade-weighted average basis
Dollar	—	—0.1
Canadian dollar	0.0	0.0
Japanese yen	—0.5	—0.7
Belgian franc	—0.5	—0.5
Dutch guilder	1.5	2.8
French franc	—2.0	—3.2
German mark	2.3	2.0
Italian lira	—1.7	—2.1
Swiss franc	4.3	4.2
British pound	—0.7	—1.5

U.S. financial market developments

The dollar has stabilized in foreign exchange markets this month amidst a further modest reduction of U.S. interest rates and the realignment of EMS currencies. Since the beginning of this month, the dollar has declined by about 2½% against the mark, but is virtually unchanged on a trade-weighted basis (see Table 1). This has left the dollar on an effective basis about 5% below its peak level in early August of this year but still some 13% above its level of a year ago (see chart).

The dollar's correction over the past three months has coincided closely with a decline in short-term U.S. interest rates (see chart). The Federal funds rate, which averaged between 19%-20% through most of this summer, is currently trading between 15% and 16%. Other short-term interest rates continue to lag it. Rates on 3-month CDs and 3-month Euro-dollar deposits are down about 200-300 basis points from their levels in early August, and the prime rate is down by about 200 basis points. While the decline in U.S. interest rates this month has been partly offset by reductions in foreign rates — notably, for France and Germany — there nevertheless has been a narrowing of short-term interest rate differentials favoring the dollar since early August (see Table 2).

Yields on long-term U.S. government bonds have also receded slightly this month, after rising in the earlier part of this year. Unlike short-term rates, however, they are still above their levels in early August, and interest rate differentials on long-term bonds are relatively unchanged over the last three months.

The movement of U.S. interest rates in the past few months, together with signs that the economy is in a mild recession, has raised expectations about further declines in interest rates. Whether they, in fact, materialize and are sustained, however, will hinge in large part on the way in which the Reagan Administration responds to the weakening of the U.S. economy. As regards monetary policy, the most desirable course obviously would be for the Fed to pursue its long-term targets in such a way as to ensure a steady, modest growth of the money supply, while correcting the present undershoot of M1-B. As regards fiscal policy, while it is imperative for the Administration and Congress to maintain the long-term objective of reducing the federal budget deficit, it now may be desir-

Nominal effective dollar exchange rate
weekly averages
index, March 1973=100

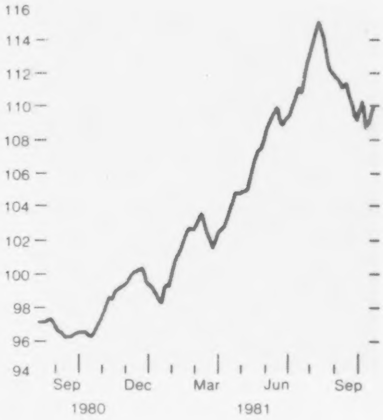


Table 2

Three-month Euro-currency deposit rates
percent per annum

	End-Jul 1981	*End-Sep 1981*	*Oct 23 1981*
Dollar	18.68	17.75	16.43
Canadian dollar	20.87	19.75	18.87
Japanese yen	7.12	7.69	7.57
French franc	21.50	27.00	18.00
German mark	12.44	12.12	11.44
Swiss franc	9.25	11.31	11.44
British pound	14.62	17.00	16.69

able to take a more relaxed attitude about the deficit in the current fiscal year in view of the prospects for a weak economy. Additional measures to curb the budget deficit would be better concentrated in future fiscal years.

U.S. monetary policy

The reduction of short-term U.S. interest rates over the past three months does not represent a departure from the Fed's long-term money supply objectives, but does signal an easing of policy relative to the very restrictive course that the Federal Reserve pursued in the late spring and early summer of this year. At that time, the Fed judged the economy to be very firm and resilient, with only a relatively small risk of recession, and it aimed at keeping bank reserves relatively flat in order to contain money supply growth. This, together with the subsequent slowing of the economy, contributed to a temporary reduction in M1-B from its level earlier this spring and brought it below the lower end of the target growth band for this year both on an adjusted and unadjusted basis for shifts into NOW accounts (see chart). M2, nonetheless, remained close to the upper end of its target range.

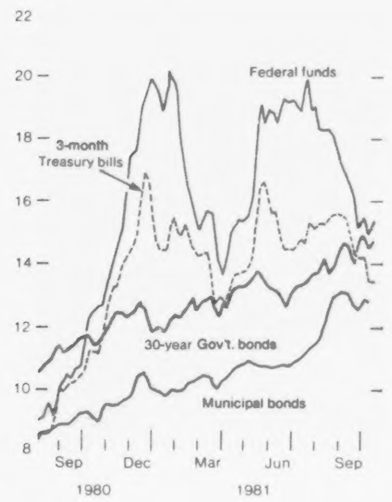
The Fed responded to the undershoot of M1-B by changing course in mid-summer, injecting reserves into the banking system at a more rapid rate. Thus, over the last thirteen weeks nonborrowed reserves have increased at a 15% annual rate, while total reserves are up at a 10% rate as banks repaid Fed borrowings. Over the last four weeks, the Fed also lowered the surcharge on borrowing from the discount window from 4% to 2%.

The Federal Reserve has come under repeated pressure from officials in the Reagan Administration to stimulate money supply growth. Treasury Secretary Regan, in particular, has prodded the Fed to bring M1-B growth for this year closer to the 3.5% level, which is the bottom end of the Fed's target range. While such prodding runs a risk of being misconstrued by the markets, the main thrust of the Treasury's criticism of the Fed's conduct is that in recent years large fluctuations in the money supply have amplified swings in the business cycle. Treasury officials support the Fed's long-term money supply objectives, but favor steady, stable money supply growth that will not accentuate business-cycle fluctuations.

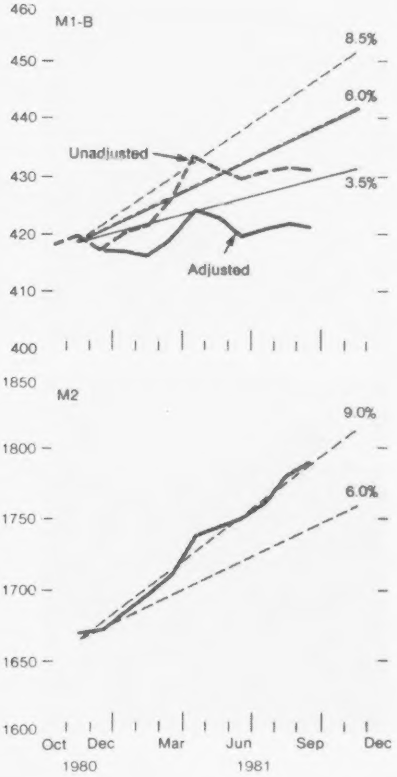
At the moment, the Treasury is concerned that unless M1-B growth accelerates, the current weakness of economic activity, which so far has been confined mainly to interest-rate-sensitive sectors of the economy such as housing and autos, could become more widespread. A number of recent economic indicators, in fact, suggest that this may be occurring already. Industrial production was down by 0.8% in September, the largest drop since July, 1980, and included declines in business equipment and consumer goods, as well as automobiles. Inventory-sales ratios, while relatively low by standards of previous recessions, have been rising steadily this year. The unemployment rate has also climbed noticeably in the last two months, from 7% in July to 7.5% in September, and the Council of Economic Advisers now anticipates that it could climb above 8% by next winter.

For the time being, however, the Federal Reserve appears content to wait and see what impact the earlier injection of bank reserves will have on the money supply. The Fed funds rate, which at one point had fallen below 13%, is once again trading between 15% and 16%. One of the Fed's principal concerns is that

Selected interest rates
in percent



U.S. money supply and target ranges
in billions of dollars



a more rapid expansion of bank reserves could result in excessive money supply growth in the months ahead, such as occurred in the second half of last year. Even though M1-B is still below target, the broader aggregates, M2 and M3, are currently close to or above the upper end of their target ranges (see chart), and could easily wind up beyond their target ranges. While the divergent behavior of the aggregates has complicated implementation of monetary policy, there was general recognition at the last Federal Open Market Committee meeting that, because of the introduction of the All Saver certificates and other financial market innovations including money market funds, it would be extremely difficult to assess recent growth in M2.

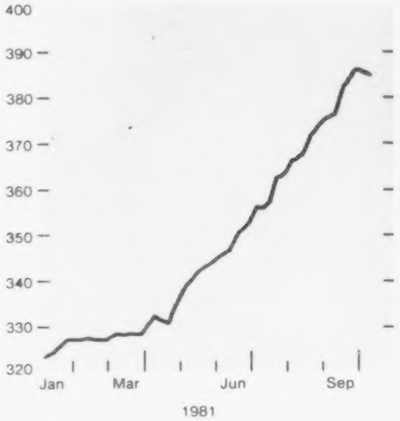
The Federal Reserve will also continue to monitor total business credit. While loans to businesses from large banks and especially commercial paper outstanding have expanded rapidly this year (see chart), it is difficult to assess whether this behavior is consistent with perceptions of a weak economy. Some of this growth is accounted for by the depressed conditions in the bond market, which have forced corporations to substitute short-term financing for longer-term funding. Public (straight-debt) bond issues of U.S. corporations in the U.S. market, for example, are estimated to have totaled only about $20 billion in the first three quarters of this year, down from $31 billion in the same period a year earlier.

The principal factor behind the surge in borrowings by businesses is the much larger volume of corporate financing requirements arising from business fixed capital spending and inventory changes relative to corporate cash flow. These requirements are estimated to have been on the order of $90 billion at an annual rate in the first three quarters of this year compared with an annual rate of just over $70 billion in the same period of 1980. Over the last two quarters business capital spending has risen at over a 9% annual rate, but there has been a leveling off of corporate cash flow and a significant increase in inventory levels, which have forced firms to borrow extensively. In this respect, the strong borrowing demand by corporations appears to be consistent both with a slowing of economic activity and maintenance of relatively high interest rates.

The Federal Reserve must also weigh the risk of rekindling inflationary pressures, particularly wage demands, that would be entailed in pursuing a more stimulative monetary policy. The improvement in the U.S. inflation performance this year is mainly reflected in a steady deceleration of producer price inflation, whereas inflation performance as measured by the GNP deflator and consumer prices has deteriorated somewhat recently. Producer prices of finished goods, for example, increased at only a 4.1% annual rate in the third quarter of this year and by just a 2% rate in September. This improvement, however, mainly reflects very favorable trends in commodity prices, including food and oil and imports generally, that cannot be expected to continue indefinitely. In order to reduce the underlying rate of inflation, further progress must come from a slowing of increases in unit labor costs. If U.S. inflation is to be reduced permanently, therefore, it is imperative to bring about a slowing of wage increases as well as improved productivity.

Recent developments on the wage front have been encouraging. The growth of hourly earnings on an adjusted basis has declined steadily over the last four quarters, from over a 10% annual rate in the fourth

*U.S. short-term business credit**
in billions of dollars



* Business loans of large U.S. banks at domestic offices, loans to U.S. residents from foreign offices of U.S. banks, and outstanding commercial paper

quarter of 1980 to less than an 8% annual rate in the third quarter of this year. Labor unions have also been agreeing to reopen contracts and to accept reduced wages and/or benefits for their members at what appears to be a record rate. The latest agreements reverse a trend established over the past two decades when settlements called for regular yearly increases of about 3% based on productivity trends in the 1950s and 1960s and for cost-of-living adjustments. They are expected to affect wage negotiations next year in a number of key industries such as automobile, trucking, rubber, meat packing, and airline, which are suffering from increased competition, both foreign and domestic (resulting from deregulation), and from depressed markets. The negotiations will cover wage settlements in these industries over the next three years, and undoubtedly will influence trends in the nonunion sector. The situation in the United States is fundamentally different from that of Britain, where contracts can be reopened at any time and where recent wage moderation has resulted only after a sustained rise in unemployment.

Under these circumstances, the Federal Reserve has been careful not to create an impression that monetary policy is being eased fundamentally. It has permitted market forces to bring about a reduction of interest rates as the economy slows and inflation recedes, without actively pushing interest rates down. Provided the Fed continues with its present course of monetary restraint there is a clear opportunity to reduce the underlying rate of inflation in the United States substantially in the coming year.

Fiscal policy

As regards fiscal policy, there remains considerable skepticism about the Reagan Administration's ability to meet its objectives for the next three years. The Office of Management and Budget (OMB) recently released new estimates of federal outlays for the current fiscal year, which are up $17½ billion from those projected in July. This reflects a higher interest rate assumption for fiscal 1982 (10.5% for 3-month Treasury bills versus 8.9% previously) and higher-than-anticipated outlays on entitlements and social security benefits. These revisions prompted President Reagan to propose additional spending cuts of $13 billion in fiscal 1982 and tax increases of $3 billion to keep the budget deficit for the year at $43 billion. Given the strong congressional opposition to additional expenditure cuts in social programs, however, the Administration now appears willing to compromise by seeking more expenditure cuts from defense and fewer from social programs, and by requesting additional taxes.

Even if the Administration is able to obtain most of its new legislative requests, it is still unlikely that the goals for the federal deficit can be met this year. Although the President has indicated that the economy is in a mild recession, the official forecast of a $43 billion budget deficit for FY 1982 is based on a more optimistic growth projection, which calls for a growth rate of 3½% in 1982 (5.1% from the fourth quarter of 1981 to the fourth quarter of 1982). A more likely outcome is that the economic growth in 1982 will be closer to 1½%-2%, in which case government revenues would turn out to be much lower than projected by the government (and outlays for unemployment compensation higher), leaving the federal budget deficit in fiscal 1982 close to $75-$80 billion and federal borrowing requirements (on budget and off budget) on the order of $85-$90 billion. According to OMB, total borrowing

Table 3

Exchange rate changes for EMS currencies from October 2 to October 23, 1981
percent

	vis-à-vis German mark		nominal effective, vis-à-vis:	
	central rates	market rates	other EMS curren.	all major curren.
German mark	-	-	2.3	1.8
French franc	-8.8	-4.5	-3.4	-3.7
Italian lira	-8.8	-3.0	-1.3	-1.9
Belgian franc	-5.5	-1.9	-0.5	-1.0
Dutch guilder	0.0	0.6	2.3	2.0
Danish krone	-5.5	-1.7	-0.9	-0.7
Irish pound	-5.5	-2.3	-1.1	-1.8

raised under federal auspices (including government-guaranteed loans and government-sponsored enterprise borrowings) in FY 1981 reached $124 billion, or 43% of all funds raised by the nonfinancial sector. In order to keep this figure from rising substantially in FY 1982, the Administration reportedly will seek some $21 billion of cuts in nonbudget federal loan guarantees.

Faced with the current weak economy, it is reasonable to permit some slippage in the budget target for FY 1982. The $43 billion figure, after all, was predicated on an economy much closer to full employment. It is more important that the government concentrate its efforts on reducing the budget deficit in the period of economic recovery. In order to bring about such an upturn, it would not be prudent to delay or to alter the tax cuts scheduled for the middle of next year. This implies, nevertheless, that the Administration may have to accept a weak economy over the next six to nine months. Together with a taut monetary policy, however, this should provide a rare opportunity to make substantial headway in slowing wage demands and in reducing the underlying rate of inflation in the United States in the coming year. As this situation unfolds, U.S. short-term interest rates can be expected to decline further. This, together with the tax cuts, will lay the basis for a sustained economic recovery.

The EMS realignment

The long-anticipated realignment of EMS currencies occurred on October 4, when the German mark and the Dutch guilder were upvalued by 5½% and the French franc and Italian lira were devalued by 3% in relation to the Belgian franc, Danish krone, and Irish pound. As shown in Table 3, changes in actual market rates since October 2 have been considerably less than the moves in bilateral central rates. The mark and the guilder so far have been trading near the floor and the franc near the ceiling of the narrow band, the reverse of positions that prevailed prior to the realignment. This reflects the unwinding of currency positions taken in anticipation of the realignment, considering the fact that interest rates in the countries of the recently devalued currencies still are relatively high, while the risk of further realignment of EMS parities in the near future is perceived as small.

The limited magnitude of the realignment in market terms also is evidenced by the small changes in nominal effective rates that have occurred since October 2. As shown in the table, this is true whether the trade-weighted change for each currency is measured only in terms of other EMS currencies or against a wider group of fifteen major currencies, including the dollar, the pound, and the yen.

The dollar weakened somewhat against the EMS currencies as a group in anticipation of the realignment, but it was not much affected by the actual event. Undoubtedly, the recent leveling out of U.S. short-term interest rates has contributed to dollar stability. Sterling dipped moderately in the wake of the realignment, but soon recovered on a trade-weighted basis, mainly as a consequence of official support for the pound through higher interest rates. The Swiss franc remained firm *vis-à-vis* the mark, and hence experienced a small effective appreciation.

Prior to the realignment France had imposed extensive exchange controls, sharply boosted domestic interest rates, and intervened heavily in the exchange market. The estimated $1¼ billion expended to sup-

Table 4

Bilateral inflation differentials and exchange rate changes versus Germany

October 1979 to mid-October 1981
percent

	Wholesale manuf. prices	*Wages in manuf.*	*EMS central rates*
Netherlands	—2.5	—5.5	0.0
Belgium	—3.5	5.3	—5.5
Denmark	3.5	7.1	—10.8
France	11.0	15.6	—8.8
Ireland	14.0	21.9	—5.5
Italy	18.5	36.2	—15.7

Table 5

Trade-weighted inflation differentials and real exchange rate changes versus other EMS countries

October 1979 to mid-October 1981
percent

	Wholesale manuf. prices	*Real exchange rates*
Germany	—5.2	0.5
Netherlands	—4.1	—0.3
Belgium	—6.8	—7.4
Denmark	2.1	—5.1
France	7.0	4.0
Ireland	10.5	8.6
Italy	15.4	3.1

port the franc in the week preceding the realignment brought the country's cumulative reserve loss in the six months ended September 1981 to more than $9 billion, notwithstanding heavy French borrowing abroad. Belgium also had raised short-term interest rates to support its currency and had intervened heavily from time-to-time. Belgian reserve losses amounted to nearly $3 billion in the first nine months of the year. Pressure on the Belgian currency also was reflected in the wide spread that opened between the commercial and the financial franc, which Belgium is not obliged to support within the EMS.

Following the realignment, several EMS participants lowered their interest rates. The German central bank took the lead by reducing its special Lombard rate by 1%, to 11%. This action also was facilitated by the prior decline in short-term U.S. and Euro-dollar interest rates and the mark's recovery against the dollar. French authorities in quick succession lowered their money market intervention rate from 18½% to 16%. Euro-franc rates fell by as much as ten percentage points from the very high levels prevailing immediately before the realignment. That domestic French interest rates have not been reduced even further undoubtedly reflects the authorities' desire to see a reflow of funds into France. French officials also have yet to relax exchange controls. The Dutch central bank cut the surcharge it imposes on banks which borrow large amounts from it from 2% to 1½%.

In Belgium, however, there has been little change in interest rates, there is no sign of any reflow of funds, and the financial franc is still trading at a 10% discount to the commercial franc. Interest rates also have remained high in Italy. The Central Bank of Ireland raised its minimum rediscount rate from 16.45% to 18.10% effective October 9, a development partly triggered by interest rate increases in the United Kingdom as well as continued weakness of the Irish pound.

An assessment

The actual and expected divergence of inflation performance of member countries, particularly France and Germany, was one of the principal forces that led to the recent realignment. The actual divergence in price and wage performance since the previous major EMS realignment some two years ago is shown in Table 4. France, Italy, and Ireland experienced sizable adverse inflation differentials *vis-à-vis* Germany, as measured by wholesale prices of manufactures. These bilateral differentials were even larger when measured by workers' average earnings in manufacturing. Trade-weighted inflation differentials *vis-à-vis* all other EMS members show a similar pattern of divergence, with France, Italy, and Ireland having experienced unfavorable differentials, and Germany, the Netherlands, and Belgium, favorable ones (see Table 5)

The exchange rate changes resulting from the recent realignment, as well as previous unilateral devaluations by Denmark and Italy, have been just about sufficient to offset the cumulative differentials in wholesale manufactures price movements. As indicated in Table 5, which shows real effective exchange rate changes *vis-à-vis* other EMS currencies since October 1979, the offset was virtually complete in the case of Germany and the Netherlands, although the currencies of France, Italy, and Ireland are still higher in real terms than they were after the first major EMS realignment in 1979. The real rates of the Danish krone and Belgian franc are below their levels of two years ago. Subsequent movement

Table 6

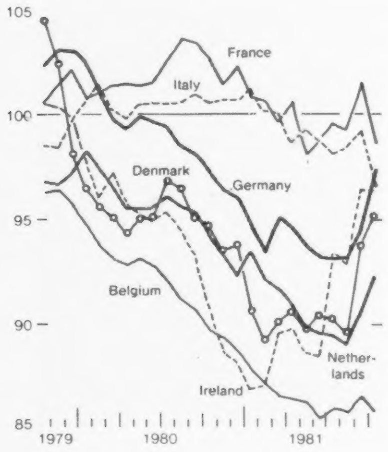
Trade-weighted inflation differentials and real exchange rate changes versus all major industrial countries

October 1979 to mid-October 1981
percent

	Wholesale manuf. prices	*Real exchange rates*
Germany	—4.4	—5.2
Netherlands	—4.6	—4.3
Belgium	—7.1	—10.6
Denmark	2.2	—8.9
France	6.0	—1.7
Ireland	8.3	—4.2
Italy	6.0	—1.7

Real effective exchange rates

index, 1975-79 average = 100



of market rates within the prescribed EMS bands could result in a further downward shift of the French franc and Italian lira and appreciation of the mark and the guilder. This would provide a somewhat fuller offset for past inflation differentials, but still would make little provision for future divergence in price performance.

Viewing the real exchange rate changes in a broader context which includes other major currencies, such as the dollar, the pound, and the yen, puts the weaker EMS currencies in a better light. All EMS currencies have depreciated in real effective terms over the past two years (see Table 6), and are currently below their average levels in the second half of the 1970s (see chart). Germany may have needed this real depreciation given its large current account deficit in 1980 and early 1981. However, the changes for the French franc, Irish pound, and Italian lira are quite modest in relation to the magnitude of adverse inflation differentials projected over the next year (approximately 4%, 5%, and 9%, respectively).

In the negotiations on the extent of the recent EMS realignment, French officials reportedly favored a slightly larger franc devaluation — close to 10% — *vis-à-vis* the German mark, presumably to provide ample leeway to reduce domestic interest rates and to pursue expansionary policies without worsening the current account. Apparently for political reasons, the French insisted that Italy match the franc's devaluation, and Italian officials resisted a large lira adjustment, arguing that it was unnecessary coming so soon after their 6% devaluation last March. They were concerned that a further sizable devaluation would aggravate domestic inflation and jeopardize the anti-inflation program which the government was trying to put in place. Germany, while welcoming the anti-inflationary benefits of appreciation, probably did not favor too large an upvaluation because of concern over jeopardizing export competitiveness. The Netherlands, with its current account already in surplus and its price performance close to Germany's, was a logical candidate for a revaluation paralleling that of Germany.

Belgian officials once again resisted pressures from other EMS members to devalue, claiming that in addition to their long-standing arguments against such a move, the caretaker government did not have the authority to take that step. Ireland also kept its effective rate virtually unchanged despite the fact that, like Belgium, it is running a large current account deficit and its economy is depressed, as reflected in an unemployment rate approaching 13%. Moreover, Ireland, unlike Belgium, has experienced a very large adverse inflation differential *vis-à-vis* other EMS members and, more recently, against the United Kingdom as well. Denmark's decision to leave its rate unchanged was more understandable, given both the large weight of Germany in its trade pattern and the progress made in reducing its current account deficit and in containing inflation.

The outlook

The durability of the new EMS parities will depend in large part on whether there is a lessening of the divergence in economic performance among member countries in the future. This, in turn, will be strongly influenced by the degree of convergence of their economic policies. Indeed, it was the prospect of differing policy directions in Germany and France and related expectations of divergent inflation and balance-of-payments performance that contributed to market pres-

Table 7

Inflation performance

% change in wholesale manufactures prices

	Latest 12 months	*Next 12 months*
Germany	8.7	4.0
Netherlands	7.7	4.4
Belgium	8.2	7.5
Denmark	12.6	11.0
France	13.8	12.5
Ireland	20.4	15.0
Italy	17.8	17.0

Table 8

Current account performance

billions of dollars

	1981	*1982*
Germany	—11	—1
Netherlands	2	4
Belgium	—7	—6½
Denmark	—2	—2
France	—6	—7
Ireland	—2	—1¾
Italy	—7	—3

sures preceding this month's EMS realignment. On one hand, the German authorities have been pursuing a restrictive monetary policy, and have taken steps to rein in the budget deficit for 1982. The Bundesbank has held the growth of central bank money through September 1981 to 4.3% from the fourth quarter of 1980, well within the lower half of its 4%-7% annual growth target. Even after the recent 1% cut in the special Lombard rate and the easing of market rates, interest rates in Germany remain high in real terms. Last month the government coalition reached agreement on a 1982 budget that would hold expenditure growth to 4.2% and bring down the deficit from this year's anticipated DM 38 billion or more (2.5% of GNP) to DM 26.5 billion (1.5% of GNP). It now appears, however, that as much as DM 7 billion in additional savings remain to be found in order to meet the targeted reduction in next year's federal government budget gap.

On the other hand, France has been pursuing expansionary policies. One contradiction in this policy stance has been the high domestic interest rates required to support the franc. Now, however, French authorities have begun to reduce their rates. Immediately following the realignment the government also announced several measures designed to reduce inflation from the 14% rate recorded in the twelve months ended September 1981 to 10%. Only a few days earlier, in presenting the 1982 budget, the government had projected that consumer prices would increase by nearly 12% in the twelve months to December 1982. The new measures consist of price controls, including a temporary freeze of the prices of services and certain basic foodstuffs, restraints on increases in public-sector tariffs, and a call on industry to limit increases in product prices to 8% per annum. The government is aiming to persuade labor unions to moderate wage demands, and the latter have indicated a willingness to consider no increase in real wages on average, provided there are improvements for lower-paid workers. The government also announced its intention to freeze temporarily FF 15 billion in funds budgeted for public investments in 1982, to be released when needed by the economic situation. While these steps may succeed in preventing inflation from accelerating and may even slow it for a time, their contribution to long-lasting moderation in prices and wages is dubious given the stimulative monetary and fiscal policies being pursued.

French money supply (M2) grew at a 17% annual rate in the first seven months of 1981, well above the 10% target set at the beginning of this year. Recently, French officials acknowledged that money supply growth could be 13%-13½% this year, or more than nominal GDP growth, versus last year's 9½%. Although money supply growth is to be held below nominal GDP growth next year, this could still imply an accelerating monetary growth since the government is projecting a rise in GDP of 17%. The latest official estimate puts the budget deficit for this year at FF 70-75 billion, or about 2.7% of GDP, compared with last year's FF 37 billion. The budget for 1982 foresees a 27.5% increase in expenditures, and a deficit of FF 95 billion (2.6% of GDP), which could be exceeded.

While France stands alone among EMS participants with its purposely stimulative policies, several others are having severe difficulties in containing expanding budget deficits and curbing inflation. In Italy, for example, the government expects the public-sector borrowing requirement to reach L 45 trillion this year, or 11.5% of GDP, versus L 36 trillion (10.5% of GDP) in 1980. Expenditures are running more than 30% ahead of last year. Even after planning nearly L 10 trillion in spending cuts, next year's budget deficit is projected to reach L 50 trillion (10.5% of GDP), and there is no certainty of parliamentary approval of the proposed cuts or of their effective implementation. Negotiations between the unions and employers on moderating wage costs, including proposals for modifying the *scala mobile* indexation system, have broken down. With three-year contract negotiations for many workers coming up shortly, the government faces another threat to its 16% inflation rate target for 1982, as wage growth this year has been 24% despite few contract renewals and a severe economic recession.

In Belgium, the central government's budget deficit is expected to exceed BF 480 billion, or 13% of GDP, this year versus BF 292 billion, or 8.4% of GDP, in 1980. Tentative agreement had been reached on a budget for 1982 that envisaged spending cuts and revenue increases of BF 150 billion to reduce the central government deficit to BF 335 billion (8.5% of GDP), but the government subsequently fell. National elections have been called for November 8, but it is uncertain whether the outcome will permit the formation of a government able to reconcile regional demands and take the necessary measures to reduce the budget deficit. Also, as in Italy, no progress has been made in securing modification of wage indexation, which is necessary if Belgium is to reduce real wages and improve competitiveness.

Accompanying these varying policy trends is the prospect of continued, if not increased, divergence of economic performance among EMS participants. Inflation differentials are unlikely to narrow much, if at all, next year. The rates of price increase in Germany and in the Netherlands are projected to decelerate by several percentage points in the next twelve months, so that even if the high inflation countries such as France, Italy, and Ireland achieve some moderation, their adverse differentials will remain large (see Table 7). The deceleration in Germany and the Netherlands as well as Denmark is based partly on reduced real wages this year, in contrast to increased real wages in Belgium, France, Italy, and Ireland.

Moreover, external payments performance could become a further source of divergence (see Table 8). The improving trend in Germany's payments position should extend through next year, bringing the current account close to equilibrium by mid-1982. The Dutch current account surplus is likely to increase substantially next year. Italy could see a considerable reduction in its current account deficit in 1982, but largely because economic recovery there is expected to lag the upturn elsewhere in Europe. France, however, may experience an increase in its current account deficit, as the benefits of devaluation are more than offset by adverse growth and inflation differentials. About the only chance for a reduction in Belgium's proportionally huge current account deficit is for economic activity to lag the upturn in its major trading partners. Ireland faces an even larger relative payments gap, with a current account deficit expected to run close to 9.5% of GDP in 1982.

Given the differing policy performances and related divergence in inflationary and external payments trends, it may be only a matter of nine months or so before tensions resurface within the EMS.

Statistical appendix

for key to data in tables see pages 18 and 19.

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Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

Effective exchange rates

Index numbers, March 1973=100. The index of the effective exchange rate for a currency is a measure of that currency's trade-weighted average appreciation or depreciation vis-à-vis the currencies of 15 other major countries. The exchange rates used in the construction of this index are the averages of daily noon spot exchange rates in New York for months and for weeks ending on dates shown. The trade weights used are based on 1976 bilateral trade in manufactures.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
pre-June 1970 parities	118.5	94.9	79.3	116.2	91.6	97.5	110.9	95.9	98.2	88.3	97.8	97.9	98.1	102.2	92.2	98.4
Smithsonian central rates	107.0	101.3	88.7	116.0	95.4	96.1	108.3	97.0	99.1	91.6	98.0	96.0	96.3	100.5	91.7	98.1
1980																
October	96.8	83.6	119.4	83.2	135.4	89.9	52.0	109.1	118.3	165.5	121.0	90.5	103.2	88.7	75.4	68.3
November	98.9	82.7	118.8	84.9	134.3	89.0	51.7	108.3	117.7	164.5	119.9	89.5	103.6	89.0	76.1	68.6
December	99.9	82.2	122.0	84.8	133.9	88.7	51.4	107.8	117.0	162.5	119.8	89.4	102.6	88.9	76.6	67.5
1981																
January	99.4	82.5	126.7	87.8	132.8	88.3	51.0	107.2	116.2	160.9	119.4	88.0	101.7	88.8	76.6	66.9
February	102.3	82.5	127.3	87.7	131.7	87.1	50.3	106.3	115.0	159.1	118.8	86.4	103.1	90.2	77.4	65.9
March	102.5	83.1	125.4	85.1	134.0	87.0	49.6	106.1	114.8	160.5	119.8	86.2	103.7	90.1	78.1	65.8
April	104.2	83.5	123.0	84.8	133.8	86.7	48.6	106.2	114.4	160.3	120.1	85.7	104.6	90.5	79.0	65.8
May	107.3	83.4	122.2	84.8	132.6	84.8	48.3	106.3	113.3	160.8	119.5	84.7	105.7	90.9	80.3	66.2
June	109.3	83.6	121.9	82.1	131.9	85.0	47.9	105.8	113.1	165.6	119.0	84.6	104.6	91.1	82.1	65.6
July	111.6	83.6	118.8	79.5	131.6	85.0	47.9	105.6	113.1	167.9	119.4	85.0	104.3	91.2	84.4	65.1
August	113.3	83.0	119.4	78.7	131.3	84.2	47.9	105.8	113.2	165.9	119.7	84.6	105.2	91.1	85.2	64.7
September	110.3	84.2	119.4	75.4	133.8	85.6	47.9	106.9	115.0	170.9	121.1	87.6	106.5	85.4	84.5	64.9
4	111.1	84.5	120.0	78.2	132.2	84.5	47.9	106.0	113.6	165.4	120.1	85.6	105.0	90.7	84.8	65.1
11	111.4	84.2	119.0	75.7	132.6	84.8	47.9	106.4	114.5	169.1	120.2	86.3	105.9	90.7	84.9	64.9
18	109.5	84.0	120.1	75.3	134.7	85.6	47.8	107.2	115.8	172.1	121.1	88.3	107.5	82.1	84.2	65.2
25	109.1	84.2	119.7	74.0	134.6	86.5	48.1	107.8	115.5	173.4	121.5	88.9	106.8	82.3	84.1	64.9
October 2	110.3	83.9	117.9	74.6	134.8	86.1	47.7	107.4	115.3	174.3	121.7	88.7	107.4	82.1	84.3	64.3
9	108.6	83.9	118.5	75.6	137.9	83.8	46.5	106.9	118.2	178.4	123.3	88.2	106.6	81.9	83.5	64.3
16	108.9	83.9	118.0	75.0	138.0	83.6	46.5	106.6	118.5	180.2	123.3	88.3	105.6	81.9	83.5	64.3
23	110.0	83.9	116.9	74.7	137.6	83.4	46.6	106.8	118.4	180.7	123.4	88.2	105.4	81.9	83.8	63.8

Real effective exchange rates

Index numbers, March 1973=100. The index of the real effective exchange rate is the index of the effective exchange rate adjusted for inflation differentials which are measured by wholesale prices of nonfood manufactures. Exchange rates and trade weights used in the construction of this index are the same as those used for effective exchange rate indices. Annual figures are averages of months.

	United States	Canada	Japan	United Kingdom	Germany	France	Italy	Belgium	Netherlands	Switzerland	Austria	Denmark	Norway	Sweden	Australia	Spain
1977	100.9	99.2	93.3	101.7	102.8	96.6	92.4	99.0	104.2	105.6	109.6	97.3	99.0	105.3	91.8	101.3
1978	96.5	92.1	107.0	106.5	103.5	97.4	90.8	98.6	104.1	122.4	109.7	103.6	94.7	96.8	87.0	97.2
1979	96.5	92.2	95.7	118.9	104.3	99.4	90.7	96.0	100.7	115.7	108.5	101.5	89.6	99.6	85.9	109.3
1980	98.3	91.3	93.5	138.5	101.3	101.2	93.1	90.6	97.5	105.6	109.2	94.1	91.6	101.1	87.4	103.5
1980																
October	97.8	90.8	99.5	145.1	99.4	101.9	92.9	88.5	96.2	104.9	108.5	93.7	92.3	101.5	88.0	100.5
November	99.9	89.9	98.2	147.5	98.8	100.6	93.2	88.2	95.1	104.6	107.1	92.5	93.0	101.8	89.0	101.2
December	100.9	89.3	99.9	146.6	98.2	101.5	93.0	87.5	94.2	103.2	107.5	92.7	92.2	101.7	89.8	100.3
1981																
January	100.7	90.3	102.2	152.4	96.8	99.9	93.6	86.5	95.5	101.2	107.8	89.6	92.4	102.3	89.6	100.2
February	104.4	89.5	101.0	152.0	95.6	99.8	92.5	85.9	94.0	100.2	106.7	88.0	94.5	104.0	91.0	98.4
March	105.1	90.1	98.1	147.1	97.3	98.8	92.4	85.4	93.6	101.2	107.5	89.0	95.8	104.1	91.8	99.6
April	107.4	90.2	95.4	146.6	96.8	99.8	91.3	85.3	92.8	99.9	107.7	89.5	96.8	103.6	92.7	99.5
May	110.2	90.7	94.8	146.8	95.9	97.3	91.8	85.1	91.8	99.9	106.5	88.6	97.7	104.6	94.0	99.8
June	111.9	91.3	94.2	142.6	95.3	98.0	91.4	84.4	91.4	102.8	105.7	89.4	96.5	104.1	96.6	98.6
July	113.8	91.7	91.7	137.6	95.3	98.9	90.7	64.8	91.4	103.9	105.7	89.2	95.5	104.5	99.5	98.8
August	114.8	91.3	91.8	136.5	95.3	98.4	90.9	84.6	90.9	103.4	105.6	88.6	95.7	104.4	100.6	97.9
September	111.0	93.5	91.6	130.9	96.7	100.7	91.7	85.4	92.4	106.1	106.6	92.6	97.2	97.9	100.2	98.5

Euro-currency market size

based on foreign-currency liabilities and claims of banks in major European countries, the Bahamas, Bahrain, Cayman Islands, Panama, Canada, Japan, Hong Kong, and Singapore
billions of dollars (rounded to nearest $5 billion), at end of period

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	
										Mar	Jun[p]
Estimated size											
Gross	205	310	390	480	590	725	930	1 190	1 470	1 525	1 530
Liabilities to nonbanks	35	55	75	80	100	125	170	230	270	310	n.a.
Liabilities to central banks	25	40	60	70	85	110	115	165	190	185	n.a.
Liabilities to other banks[a]	145	215	255	330	405	490	645	795	1 010	1 030	n.a.
Net	110	160	215	250	310	380	485	600	735	755	770
Claims on nonbanks	45	65	100	115	150	195	245	295	365	380	n.a.
Claims on central banks and on banks outside market area[b]	45	75	95	115	135	155	195	245	295	300	n.a.
Conversions of Euro funds into domestic currencies by banks in market area[c]	20	20	20	20	25	30	45	60	75	75	n.a.
Euro-dollars as % of gross liabilities in all Euro-currencies	78	73	77	78	79	76	74	72	76	77	n.a.

[a] Includes unallocated liabilities
[b] Includes unallocated claims
[c] In European market area only
[r] revised
[p] preliminary

Euro-currency deposit rates

prime banks' bid rates in London, at or near end of month

	1978	1979	1980	1981							
	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Euro-dollar:											
overnight	10.62	14.00	19.25	15.75	15.00	17.17	17.62	19.12	19.50	17.00	15.75
7-day fixed	10.62	14.00	19.75	15.50	14.37	16.00	17.50	18.50	18.50	17.87	16.00
one month	11.00	14.37	19.12	16.81	14.81	17.75	17.67	18.12	18.68	18.00	16.50
three months	11.69	14.44	17.62	16.62	14.81	16.87	17.75	17.81	18.68	18.44	17.75
six months	12.31	14.44	16.75	16.75	14.81	17.00	16.94	17.25	18.68	18.56	18.06
twelve months	12.00	12.87	14.87	16.06	14.81	16.31	16.12	16.31	17.62	17.81	17.37
Euro-mark:											
one month	3.19	8.50	8.87	14.87	12.31	12.12	12.25	12.25	12.06	12.18	11.87
three months	3.31	8.56	8.87	14.25	12.31	12.44	12.68	12.37	12.44	12.44	12.12
six months	3.69	8.56	8.87	13.37	12.00	12.44	12.68	12.37	12.56	12.68	12.25
twelve months	3.81	8.12	8.93	12.75	11.43	12.00	12.68	12.31	12.44	12.44	11.69
Euro-Swiss franc:											
one month	—.06	5.19	6.00	8.37	7.50	9.50	9.62	9.37	8.56	8.44	10.75
three months	0.00	5.75	6.00	8.37	7.62	9.50	10.00	9.87	9.25	8.87	11.31
six months	0.12	5.87	5.75	8.37	7.62	9.50	10.12	9.87	9.62	9.31	11.44
twelve months	0.62	5.56	5.50	7.62	7.62	9.50	9.37	9.12	9.06	8.75	10.12
Euro-sterling:											
one month	12.00	16.75	14.75	13.75	12.50	12.37	11.87	11.81	14.25	13.50	16.50
three months	12.62	16.75	14.75	12.75	12.50	12.37	12.37	12.50	14.62	13.87	17.00
six months	13.25	16.75	14.25	12.12	12.37	12.37	12.75	12.81	14.62	14.00	17.00
twelve months	13.00	15.25	14.00	12.00	12.18	12.37	12.87	13.12	14.50	14.00	16.25
Euro-French franc:											
one month	10.50	13.87	11.12	11.75	12.00	13.12	22.50	26.00	21.50	31.00	31.50
three months	9.87	14.00	11.75	12.87	12.37	13.50	19.50	23.00	21.50	27.50	27.00
six months	9.87	14.12	12.25	13.00	12.50	13.62	18.50	21.00	21.25	25.00	25.25
twelve months	10.25	13.75	12.87	13.00	13.00	13.62	17.00	19.00	19.50	22.00	23.00
Euro-yen:											
one month	—.69	7.62	9.12	8.62	7.75	6.62	7.12	7.00	6.75	7.12	7.12
three months	0.62	8.31	9.25	8.62	7.62	7.37	7.75	7.50	7.12	7.50	7.68
six months	1.87	8.62	9.62	8.37	7.75	7.37	7.87	7.87	7.37	7.50	7.87
twelve months	2.19	7.94	9.37	8.37	7.81	7.37	8.25	7.87	7.87	7.87	8.12

Euro-currency bank credits

publicly-announced in period, in millions of dollars

	1978	1979	1980	1981			Jan-Oct	
				Aug[r]	Sep[r]	Oct[p]	1981	1980
Industrial countries	**28 952**	**27 248**	**39 100**	**1 893**	**4 551**	**5 020**	**72 816**	**28 493**
Australia	212	941	2 475	—	300	182	849	2 473
Canada	5 705	1 845	1 743	—	50	250	2 940	656
Denmark	2 242	1 205	1 720	162	—	85	1 274	1 358
Finland	550	92	1 040	—	70	—	446	1 040
France	1 914	2 955	1 745	—	—	500	3 212	1 561
Greece	508	1 009	1 333	—	60	100	1 004	1 237
Ireland	616	687	237	—	200	—	752	131
Italy	2 485	3 708	6 268	791	68	290	4 680	5 942
Norway	1 517	935	685	—	—	—	427	539
Spain	2 426	4 184	5 457	238	13	289	2 953	3 999
Sweden	1 872	1 263	1 370	—	—	—	1 565	1 370
United Kingdom	3 898	795	1 470	—	150	—	542	1 410
United States	1 206	2 348	6 719	470	3 245	2 230	47 282	2 298
Other[a]	3 801	5 281	6 838	232	395	1 094	3 890	4 477
Developing countries	**37 290**	**47 964**	**35 054**	**5 058**	**1 741**	**3 468**	**35 416**	**28 936**
Non-OPEC countries	26 891	35 410	24 009	3 821	1 118	2 056	26 824	19 121
Argentina	1 461	2 965	2 506	652	140	—	1 779	2 215
Brazil	5 634	6 278	4 158	582	217	195	4 210	2 774
Chile	1 045	867	1 322	587	151	157	1 979	1 019
Korea	2 651	3 258	1 917	113	126	563	2 561	1 204
Malaysia	858	1 168	—	140	—	650	1 375	—
Mexico	7 250	8 243	5 971	649	100	201	6 565	5 426
Morocco	605	499	420	—	—	—	542	419
Peru	—	596	480	100	12	—	1 107	425
Philippines	2 073	2 067	1 056	100	—	—	824	806
Taiwan	254	1 063	314	320	—	—	921	280
Other[b]	5 060	8 406	5 865	558	372	290	4 961	4 553
OPEC countries	10 398	12 553	11 045	1 237	623	1 412	8 592	9 814
Algeria	2 576	1 906	40	—	—	—	—	40
Indonesia	1 118	1 061	1 435	—	300	120	725	1 026
Nigeria	825	1 373	1 330	48	40	126	1 518	1 276
United Arab Emirates	726	401	101	300	—	—	363	60
Venezuela	2 054	6 830	6 715	829	143	1 166	4 955	5 986
Other	3 099	982	1 424	60	140	—	1 031	1 426
Communist countries	**3 767**	**7 325**	**2 809**	**90**	—	**70**	**1 371**	**2 567**
China	—	3 395	181	—	—	—	50	139
East Germany	642	796	303	—	—	70	470	303
Hungary	700	260	550	—	—	—	550	549
Poland	374	849	800	—	—	—	—	799
Other[c]	2 051	2 025	975	90	—	—	301	777
International organizations	**160**	**275**	**429**	—	—	—	**70**	**429**
TOTAL	**70 169**	**82 812**	**77 392**	**7 041**	**6 292**	**8 558**	**109 673**	**60 425**

[a] includes multi-national organizations [b] includes regional development organizations [c] includes COMECON institutions [p] preliminary
[r] revised

International bond yields

long-term issues, at or near end of month

	1978	1979	1980	1981						
	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
U.S. companies:											
U.S. dollar	8.55	10.13	11.76	12.17	12.46	12.51	12.64	12.32	12.67	13.33	13.36
Swiss franc	5.70	6.61	7.27	7.26	7.42	7.46	7.55	7.31	7.36	7.61	7.58
European companies:											
U.S. dollar	9.21	10.93	12.42	13.06	12.94	12.99	13.81	13.85	13.99	14.44	15.14
German mark	6.84	7.55	8.79	9.58	9.16	9.18	9.71	9.71	9.83	9.91	9.74
Governments:											
U.S. dollar	9.12	10.66	11.83	12.37	12.37	12.43	12.92	12.70	12.89	13.19	13.63

New international bond issues

new issues in period, in millions of dollars

	1978	*1979*	*1980*	*1981*			*Jan-Oct*	
				Aug	*Sep*	*Oct^p*	*1981*	*1980*
By type:								
Euro-bonds, total	**14 125**	**18 726**	**23 970**	**2 477**	**2 199**	**2 930**	**22 788**	**20 695**
by category of borrower								
U.S. companies	1 122	2 872	4 107	555	450	355	4 387	3 501
Foreign companies	4 540	7 183	9 032	832	1 196	1 077	9 382	7 378
State enterprises	3 291	4 524	5 839	717	292	837	5 135	5 406
Governments	3 643	2 433	3 045	83	60	266	1 658	2 806
International organizations	1 529	1 714	1 947	290	201	395	2 226	1 604
by currency of denomination								
U.S. dollar	7 290	12 565	16 427	2 150	1 830	2 704	19 585	14 142
German mark	5 251	3 626	3 607	76	161	88	555	3 294
Dutch guilder	394	531	1 043	—	58	—	422	882
Canadian dollar	—	425	279	16	92	41	191	279
European unit of account	165	253	65	40	—	80	237	65
Other	1 025	1 326	2 549	195	58	17	1 798	2 033
Foreign bonds outside the United States, total	**14 359**	**17 749**	**14 521**	**815**	**1 089**	**738**	**10 073**	**12 048**
by category of borrower								
U.S. companies	245	217	307	69	50	—	400	219
Foreign companies	2 110	3 463	3 157	364	313	26	2 777	2 315
State enterprises	3 163	3 284	2 830	115	80	245	2 564	2 311
Governments	5 771	7 663	4 086	114	406	238	1 969	3 732
International organizations	3 070	3 122	4 141	153	240	229	2 363	3 471
by currency of denomination								
German mark	3 789	5 379	4 839	39	—	176	818	4 350
Swiss franc	5 698	9 777	7 617	538	648	272	6 070	5 993
Dutch guilder	385	75	259	—	146	—	399	259
Japanese yen	3 826	1 833	1 088	215	110	235	1 911	829
Other	671	685	718	23	185	55	875	396
Foreign bonds in the United States, total	**5 795**	**4 515**	**3 429**	**251**	**510**	—	**4 782**	**3 004**
by category of borrower								
Canadian entities	3 142	2 193	2 136	193	500	—	3 699	1 945
International organizations	459	1 100	550	—	—	—	—	550
Other	2 194	1 222	743	58	10	—	1 083	509
By country of borrower:								
Industrial countries	**24 964**	**31 886**	**32 732**	**2 639**	**3 135**	**2 526**	**29 419**	**27 912**
Australia	1 218	593	539	—	—	—	345	499
Austria	1 027	1 218	1 859	86	134	186	1 264	1 655
Canada	4 764	4 197	3 797	778	887	878	7 705	3 443
Denmark	1 017	752	1 125	—	—	—	461	1 014
Finland	952	699	392	—	74	—	428	391
France	1 286	2 106	2 820	100	105	175	2 516	2 171
Japan	3 467	5 775	5 309	821	842	165	5 264	3 949
Netherlands	250	832	1 585	46	88	53	441	1 395
Norway	2 751	1 954	892	—	110	104	435	733
Sweden	876	1 530	3 244	46	70	88	1 320	2 663
United Kingdom	1 365	1 181	1 733	—	54	176	869	1 632
United States	2 973	6 767	5 587	624	500	355	4 787	4 892
Developing countries	**4 227**	**3 093**	**2 485**	**461**	**222**	**498**	**3 585**	**2 145**
Non-OPEC countries	2 684	2 675	1 942	461	197	498	3 249	1 601
Brazil	843	930	349	—	—	—	60	348
Mexico	568	363	544	378	137	385	2 328	438
Philippines	170	175	70	—	—	—	30	70
OPEC countries	1 543	418	543	—	25	—	336	543
Algeria	721	208	—	—	—	—	—	—
Venezuela	588	55	398	—	—	—	221	398
Communist countries	**30**	**75**	**65**	—	—	**20**	**50**	**65**
Hungary	—	—	65	—	—	20	20	65
International organizations	**5 058**	**5 936**	**6 638**	**443**	**441**	**624**	**4 589**	**5 625**
TOTAL	**34 279**	**40 990**	**41 920**	**3 543**	**3 798**	**3 668**	**37 643**	**35 747**

Central bank discount rates

	1977	*1978*	*1979*	*1980*	*1981*			*Current*	
	end Dec	*end Dec*	*end Dec*	*end Dec*	*end Mar*	*end Jun*	*end Sep*	*Oct 23 1981*	*effective since*
United States	6.00	9.50	12.00	13.00	13.00	14.00	14.00	14.00	May 5, 81
Canada	7.50	10.75	14.00	17.36	16.69	19.08	19.63	18.30	Oct 22, 81
Japan	4.25	3.50	6.25	7.25	6.25	6.25	6.25	6.25	Mar 18, 81
United Kingdom	7.00	12.50	17.00	14.00	12.00	12.00	15.00	15.25	Oct 21, 81
Belgium	9.00	6.00	10.50	12.00	16.00	13.00	13.00	13.00	May 28, 81
France	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	3.00	3.00	6.00	7.50	7.50	7.50	7.50	7.50	May 2, 80
Italy	11.50	10.50	15.00	16.50	19.00	19.00	19.00	19.00	Mar 23, 81
Netherlands	4.50	6.50	9.50	8.00	9.00	9.00	9.00	9.00	Mar 3, 81
Austria	5.50	4.50	3.75	6.75	6.75	6.75	6.75	6.75	Mar 21, 80
Denmark	9.00	8.00	11.00	11.00	11.00	11.00	11.00	11.00	Oct 27, 80
Finland	8.25	7.25	8.50	9.25	9.25	9.25	9.25	9.25	Feb 1, 80
Ireland	6.75	11.85	16.40	12.75	12.75	14.40	16.45	18.10	Oct 11, 81
Norway	6.00	7.00	9.00	9.00	9.00	9.00	9.00	9.00	Nov 30, 79
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	Jul 26, 77
Sweden	8.00	6.50	9.00	10.00	12.00	12.00	12.00	11.00	Oct 14, 81
Switzerland	1.50	1.00	2.00	3.00	4.00	5.00	6.00	6.00	Sep 2, 81
Argentina	165.27	108.19	89.90	87.01	109.34	143.39	104.55	104.55	Sep, 81
Korea	14.00	14.50	14.50	15.50	15.50	15.50	15.50	15.50	Nov 11, 80
New Zealand	10.00	10.50	13.00	14.00	14.00	14.00	14.00	14.00	Jul, 80
Philippines	6.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	May 19, 78
Singapore	3.50	4.50	6.75	10.50	11.00	10.00	10.75	10.75	Jul 10, 81
South Africa	9.00	8.50	7.00	7.00	8.00	10.50	12.50	12.50	Jul 21, 81
Venezuela	7.00	7.50	11.00	13.00	13.00	12.00	14.00	14.00	Aug 26, 81

*Announcement of minimum lending rate (MLR) discontinued August 20, 1981.
New series, Bank of England's intervention rate for 15-33 day eligible bank bills.

Day-to-day money rates

monthly averages

	1978	*1979*	*1980*	*1981*							
	Dec	*Dec*	*Dec*	*Feb*	*Mar*	*Apr*	*May*	*Jun*	*Jul*	*Aug*	*Sep*
United States	10.03	13.78	18.90	15.93	14.70	15.72	18.52	19.10	19.04	17.82	15.87
Canada	9.44	13.83	15.61	16.58	16.90	16.79	17.17	18.94	18.85	20.21	20.15
Japan	4.57	8.02	9.49	8.60	8.04	7.19	7.06	7.12	7.25	7.20	7.22
Australia	8.40	7.84	9.51	10.35	11.11	11.83	12.07	13.04	13.44	13.09	12.90
United Kingdom	10.00	14.87	13.00	12.19	11.06	10.15	9.95	9.62	10.63	11.37	11.37
Belgium	6.73	10.65	9.68	9.18	10.13	16.51	13.00	9.58	11.07	12.02	11.82
France	6.67	12.17	10.87	10.91	11.72	12.23	16.03	19.93	18.49	17.50	17.75
Germany	3.61	9.15	9.13	10.57	11.25	11.27	11.79	11.93	12.00	11.97	12.00
Italy	11.00	16.00	17.50	17.37	19.62	19.62	19.75	20.00	20.00	20.12	20.25
Netherlands	10.00	15.67	8.37	9.12	9.75	9.50	10.88	11.13	12.50	12.12	11.87
Austria	5.37	8.50	11.50	9.00	11.00	12.00	9.00	12.25	12.00	12.25	n.a.
Finland	9.29	13.53	12.50	12.50	11.72	10.57	11.00	11.00	11.00	11.45	11.50
Ireland	12.12	16.88	13.31	13.38	13.12	15.38	14.12	13.81	15.50	17.38	19.50
Spain	16.75	9.61	16.74	12.50	11.98	13.89	16.80	18.53	16.68	17.42	17.36
Sweden	6.26	11.99	11.41	16.97	15.40	14.20	14.96	14.56	13.54	13.95	11.95
Switzerland	0.00	1.25	5.75	3.50	4.50	5.00	3.62	3.00	2.37	2.62	6.50
Argentina	n.a.	78.22	70.84	92.07	133.08	96.66	108.76	131.19	130.32	114.89	88.48
Brazil	35.64	32.28	49.68	54.48	56.64	49.32	65.16	54.12	60.36	68.16	65.52
Hong Kong	9.67	14.19	14.05	18.00	16.85	16.43	16.67	16.12	16.64	14.04	15.02
Korea	15.00	15.00	14.82	14.82	14.82	14.82	14.82	14.82	14.82	14.82	14.82
Philippines	13.22	16.25	15.70	14.43	17.34	15.59	16.61	16.12	11.53	13.19	12.81
Singapore	4.98	10.17	10.23	12.73	9.73	6.76	7.92	13.08	15.38	14.71	n.a.
South Africa	7.11	3.81	5.60	7.06	7.26	7.49	8.51	8.78	10.06	10.77	10.79
Euro-dollars	10.80	14.41	19.22	16.14	14.57	16.36	18.19	18.75	19.13	18.66	16.25

Treasury bill rates

bond-equivalent yields, at or near end of month

	1978	1979	1980	1981							
	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
United States	9.42	12.39	14.87	14.80	13.55	15.51	16.00	14.75	15.51	16.18	15.32
Canada	10.46	13.66	17.01	16.83	16.44	17.35	18.43	18.83	20.29	20.82	19.38
Japan	3.39	5.68	5.93	5.93	5.93	5.68	5.68	5.68	5.68	5.68	5.68
Australia	8.35	9.31	12.17	12.68	12.72	13.78	13.22	13.32	13.99	14.11	13.47
United Kingdom	12.01	16.45	13.45	11.93	11.87	11.57	11.78	12.24	14.31	13.63	16.26
Belgium	9.25	14.40	12.75	13.25	15.00	17.00	16.75	15.00	16.25	15.75	15.75
Ireland	11.83	16.37	12.84	12.84	12.70	13.85	14.65	14.72	15.42	16.20	17.47
Italy	12.81	15.62	17.02	17.02	19.01	18.99	19.66	21.36	21.36	21.24	21.73
Netherlands	9.50	12.75	8.00	8.75	9.25	9.75	11.75	12.00	15.25	13.87	12.00
Spain	13.00	15.00	17.20	15.50	14.60	13.25	17.00	17.00	16.00	16.25	15.37
Sweden	5.84	9.74	12.87	16.85	15.73	15.73	15.77	13.97	12.79	12.79	12.79
Argentina	82.55	71.04	66.19	90.06	107.97	86.79	104.34	121.03	122.48	114.02	83.16
Brazil	41.21	27.84	76.84	73.58	70.46	71.33	71.88	72.98	72.64	72.18	78.57
Korea	17.01	19.53	16.35	18.98	18.98	18.98	18.16	16.00	16.00	17.57	17.00
Mexico	12.75	17.89	27.73	28.76	28.55	28.36	28.08	28.34	30.73	n.a.	n.a.
New Zealand	10.50	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25
Philippines	12.08	12.63	12.74	12.65	12.69	12.76	12.76	13.20	13.51	13.10	12.93
Singapore	4.01	6.18	6.77	6.84	6.60	6.58	6.57	6.34	6.54	6.54	n.a.
South Africa	7.61	4.30	6.31	7.59	7.82	7.89	9.08	10.26	11.58	11.61	11.66

Representative money-market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money-market instruments, other than Treasury bills, at or near end of month

	1978	1979	1980	1981							
	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
United States	10.57	13.70	17.62	15.48	14.25	16.80	16.94	17.07	17.62	17.48	16.80
Canada	10.62	14.15	17.50	16.85	17.05	17.55	19.00	19.35	21.10	22.05	19.75
Japan	4.64	8.01	9.80	8.46	7.34	6.76	7.49	7.20	7.12	7.30	7.14
Australia	9.10	10.30	13.00	14.00	15.10	15.75	15.50	16.00	16.00	16.00	15.50
United Kingdom	12.50	17.00	14.75	12.50	12.50	12.37	12.44	12.56	14.69	13.94	16.81
Belgium	9.25	14.45	13.10	13.00	14.00	17.00	16.85	15.25	16.50	16.00	16.00
France	6.44	12.62	11.56	13.50	12.75	13.37	18.25	18.25	17.12	17.75	18.62
Germany	3.70	8.70	10.20	14.50	13.30	12.90	13.30	12.90	12.90	12.80	12.15
Ireland	13.00	18.12	13.62	14.78	14.00	15.37	15.94	15.88	17.50	17.37	21.00
Italy	11.37	17.12	17.37	17.50	19.75	19.75	20.00	20.50	20.37	20.75	20.50
Netherlands	10.50	13.00	9.37	11.25	10.37	11.25	12.25	11.87	13.37	13.62	13.25
Spain	22.80	13.20	17.40	15.00	13.20	13.79	16.28	17.02	16.12	16.09	15.39
Switzerland	0.50	6.12	7.50	8.50	9.37	10.00	10.50	10.37	9.62	9.12	11.50
Hong Kong	11.82	14.37	17.69	16.86	16.27	16.45	17.55	17.00	17.15	17.51	17.49
Korea	17.01	19.53	16.35	16.35	16.35	15.60	15.70	15.70	15.70	15.70	15.70
New Zealand	12.00	16.00	14.25	14.80	15.60	14.70	14.50	13.90	14.90	16.15	16.40
Philippines	11.48	10.41	15.01	16.86	16.63	16.67	17.50	16.66	15.16	17.11	16.92
Singapore	7.38	10.12	14.12	13.69	11.69	10.06	12.44	12.31	14.44	14.31	n.a.
South Africa	7.85	4.72	7.12	9.73	9.89	9.84	12.37	15.05	16.12	15.31	14.24

Commercial bank deposit rates.

at or near end of month

	1978	1979	1980	1981							
	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
United States	10.90	13.55	16.25	14.75	13.50	16.75	16.75	17.15	17.75	17.50	15.00
Canada	10.45	14.05	17.00	17.15	16.85	17.50	18.50	19.30	21.05	21.95	19.50
Japan	2.50	8.37	9.00	8.25	7.25	7.35	7.40	7.60	7.55	7.50	7.45
Australia	8.50	10.25	12.71	14.14	14.95	16.17	15.43	15.23	15.54	15.63	15.30
United Kingdom	12.25	16.81	14.87	12.37	12.44	12.41	12.50	12.56	14.56	13.87	16.62
Belgium	9.87	14.50	12.63	13.50	15.50	16.75	16.50	15.25	16.00	15.63	15.50
France	6.50	12.50	11.25	12.00	13.00	15.00	16.00	17.00	16.50	10.50	10.63
Germany	3.50	7.75	8.00	13.50	12.50	11.75	12.25	12.00	12.00	12.00	11.25
Italy	12.50	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25
Netherlands	11.62	13.50	9.50	11.50	10.50	11.50	12.25	11.87	13.62	13.75	13.00
Austria	6.75	8.50	11.25	9.75	11.50	11.75	12.50	12.50	12.37	12.50	12.50
Denmark	7.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Finland	3.25	4.25	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Ireland	12.75	17.87	13.62	14.62	13.50	15.12	15.75	15.63	17.00	17.25	20.50
Norway	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Spain	4.50	4.50	4.50	4.50	4.50	12.00	13.00	13.00	13.00	13.25	12.75
Sweden	6.25	8.75	9.75	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25
Switzerland	0.12	4.75	7.50	8.50	7.25	8.50	9.00	9.00	8.50	8.75	9.75
Argentina	86.63	72.64	72.00	97.00	130.00	87.00	123.00	150.00	130.00	123.78	86.00
Brazil	46.80	45.00	69.48	72.84	73.44	75.36	76.20	75.48	73.92	72.24	73.68
Hong Kong	4.50	9.25	13.00	13.25	13.00	13.00	13.00	13.00	13.00	13.00	16.00
Korea	15.00	15.00	14.82	14.82	14.82	14.82	14.82	14.82	14.82	14.82	14.82
Mexico	12.00	16.75	26.15	27.00	26.65	26.70	27.25	28.35	30.47	n.a.	n.a.
New Zealand	12.00	15.90	13.50	14.00	14.50	14.30	14.60	14.00	14.80	15.00	15.50
Philippines	8.50	10.50	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Singapore	7.31	10.31	13.19	12.19	10.75	9.12	11.88	11.31	13.12	13.00	n.a.
South Africa	7.30	4.82	7.87	10.75	10.27	10.87	13.37	15.75	16.37	15.00	14.37
Venezuela	7.25	15.00	16.00	16.00	14.00	14.00	14.00	14.00	14.00	16.00	16.00

Commercial bank lending rates to prime borrowers

at or near end of month

	1978	1979	1980	1981							
	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
United States	11.75	15.25	21.50	19.00	17.00	18.00	20.50	20.00	20.50	20.50	19.50
Canada	11.50	15.00	18.25	18.25	17.75	18.25	19.50	20.00	21.75	22.75	21.25
Japan	4.50	6.51	8.16	7.86	7.74	7.52	7.33	7.18	7.14	7.20	7.20
Australia	11.00	10.75	13.50	13.50	14.25	15.00	15.00	15.75	15.75	15.75	15.75
United Kingdom	13.50	18.00	15.00	15.00	13.00	13.00	13.00	13.00	13.00	13.00	14.00
Belgium	10.00	15.25	15.75	15.25	16.50	19.25	18.75	17.50	18.00	18.00	18.00
France	9.80	12.50	12.25	13.00	13.75	13.75	17.00	15.90	15.30	15.30	15.30
Germany	5.50	9.75	11.50	12.00	13.75	13.75	14.25	14.25	14.25	14.25	14.25
Italy	15.00	19.50	20.50	21.00	22.50	22.50	21.50	21.50	21.50	21.50	21.50
Netherlands	12.00	15.00	10.75	10.75	11.25	11.25	13.25	13.25	14.75	15.00	13.75
Austria	8.75	8.50	12.50	12.50	12.50	12.50	13.00	13.50	13.50	13.50	13.50
Denmark	10.00	13.75	13.75	13.75	13.75	13.75	13.75	14.00	14.50	14.50	14.50
Finland	7.87	9.06	9.83	9.84	9.85	9.85	9.86	9.85	9.85	9.85	n.a.
Ireland	13.75	16.00	14.50	14.50	14.50	14.50	15.50	15.50	15.50	17.25	17.25
Norway	11.00	11.00	12.50	12.50	12.50	12.50	13.75	13.75	13.75	13.75	13.75
Spain	9.00	9.00	18.50	16.92	15.46	15.11	17.25	18.25	17.81	17.40	17.27
Sweden	8.50	10.75	11.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75
Switzerland	5.00	5.00	5.75	6.00	6.50	7.00	7.00	7.00	7.00	7.00	8.00
Argentina	86.75	80.00	77.00	114.00	146.00	90.00	141.00	181.00	140.00	123.00	91.00
Brazil	61.70	57.00	88.00	133.75	133.75	133.75	127.38	129.50	127.63	120.25	126.50
Hong Kong	8.75	14.50	17.00	17.00	17.00	17.00	17.00	17.00	18.00	18.00	20.00
Korea	18.50	18.50	19.50	19.50	19.50	19.50	19.50	19.50	19.50	19.50	19.50
Mexico	17.50	19.00	24.25	25.98	26.59	26.91	27.22	29.66	28.42	n.a.	30.46
New Zealand	9.75	11.75	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Philippines	14.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	18.00	18.00	18.00
Singapore	7.65	9.50	13.60	14.30	13.68	12.72	12.55	13.40	14.32	13.92	n.a.
South Africa	11.50	9.50	9.50	11.00	11.50	11.50	13.00	14.00	16.00	16.00	16.00
Venezuela	10.25	13.00	15.00	15.00	13.00	13.00	13.00	13.00	13.00	17.00	17.00

Domestic government bond yields

long-term issues, at or near end of month

	1978	1979	1980	1981						
	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
United States	9.00	10.20	11.46	13.16	13.21	14.13	13.52	13.44	14.24	14.82	15.31
Canada	9.68	11.32	12.69	13.38	13.48	15.07	14.96	15.03	17.07	16.77	17.66
Japan	6.40	8.63	9.04	8.89	8.67	8.84	9.23	9.20	9.31	9.36	9.33
Australia	8.90	10.45	13.00	13.10	13.10	13.10	13.10	13.20	14.30	15.00	15.00
United Kingdom	12.75	13.83	13.05	13.36	12.86	13.18	13.50	13.98	14.45	14.47	15.39
Belgium	8.80	11.13	13.04	13.44	13.57	13.52	13.85	14.18	13.97	14.06	13.97
France	9.94	12.59	14.31	15.05	14.98	14.95	17.25	17.35	17.11	17.03	17.08
Germany	6.65	7.91	9.19	10.38	9.97	10.12	10.68	10.30	10.45	10.72	10.36
Italy	10.89	11.28	12.12	12.88	14.46	14.53	14.27	13.81	14.09	14.18	14.05
Netherlands	8.48	9.29	10.48	10.96	11.38	11.29	11.89	11.43	11.57	11.95	12.30
Austria	7.91	8.20	9.62	10.06	10.33	10.18	10.36	10.78	10.87	n.a.	n.a.
Denmark	17.27	18.28	19.98	19.29	19.67	20.26	20.59	20.75	21.32	21.28	20.13
Finland	9.19	9.58	10.42	10.92	10.96	10.97	10.96	10.95	10.96	10.96	10.96
Ireland	13.44	16.64	15.63	16.01	16.12	16.57	16.99	17.31	17.44	17.61	n.a.
Norway	8.19	10.04	10.44	11.50	11.57	11.65	11.65	11.65	11.65	12.58	12.51
Spain	n.a.	n.a.	n.a.	n.a.	n.a.	13.00	12.75	12.75	12.75	12.75	12.75
Sweden	10.09	11.22	12.61	13.60	13.43	13.49	13.56	13.63	n.a.	n.a.	n.a.
Switzerland	3.03	4.20	4.63	5.20	5.40	5.79	5.85	5.59	5.52	5.84	6.13
Argentina	112.18	47.94	36.84	42.99	66.43	65.64	144.24	108.79	184.60	148.16	115.46
New Zealand	10.02	12.98	12.99	12.97	12.88	12.85	12.85	12.90	n.a.	n.a.	n.a.
Philippines	13.40	13.20	13.40	13.40	13.40	13.42	13.41	13.41	13.41	13.41	13.41
South Africa	9.85	9.44	11.81	12.73	12.75	12.69	13.03	13.05	13.07	13.12	13.27
Venezuela	7.24	7.29	7.39	7.40	7.30	10.00	10.00	10.00	11.00	12.00	12.00

Domestic corporate bond yields

long-term issues, at or near end of month

	1978	1979	1980	1981							
	Dec	Dec	Dec	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
United States	9.25	10.75	13.00	14.13	14.00	15.00	14.25	14.63	15.75	16.00	16.63
Canada	10.34	12.07	13.62	14.34	14.41	16.03	15.94	15.93	17.93	17.95	19.09
Japan	6.94	8.34	8.60	8.25	8.15	7.95	8.09	8.22	7.90	7.90	8.09
Australia	10.25	11.65	14.25	14.10	14.25	14.50	15.00	15.25	16.00	16.50	16.50
United Kingdom	13.53	14.96	14.21	14.14	14.35	14.44	14.94	15.31	16.02	15.97	17.23
France	10.27	12.92	15.23	15.13	15.39	15.39	15.35	15.37	18.20	17.80	17.64
Germany	6.80	8.20	9.50	10.00	10.90	10.90	11.40	11.70	11.70	11.80	11.10
Italy	10.12	10.22	12.99	13.05	16.82	17.01	19.84	20.02	21.50	21.97	20.48
Netherlands	8.62	9.95	10.71	10.77	11.21	11.07	11.76	11.66	11.40	12.04	12.48
Norway	8.37	10.53	11.24	12.07	12.36	12.76	12.76	12.76	12.76	13.91	14.41
Spain	13.49	14.20	14.82	14.36	14.55	14.73	14.51	14.27	14.44	14.36	n.a.
Sweden	10.03	10.21	11.95	13.46	13.56	13.63	13.66	13.65	13.65	13.70	13.74
Switzerland	4.85	5.53	5.63	5.93	6.08	6.08	6.44	6.33	6.09	6.98	7.12
Korea	24.00	32.50	26.30	24.70	23.00	22.30	22.30	22.30	22.30	22.60	23.80
Mexico	20.37	21.99	28.03	30.90	30.20	30.97	28.92	30.71	31.63	38.37	n.a.
Venezuela	12.43	14.55	16.15	16.20	16.00	16.25	16.30	16.50	17.00	18.00	18.00

Key to data in tables

I. International markets

Definitions

An *international bond* issue is one sold outside the country of the borrower. It may be either a Euro-bond issue or a foreign bond issue.

A *Euro-bond* issue is one underwritten by an international syndicate and sold principally in countries other than the country of the currency in which the issue is denominated.

A *foreign bond* issue is one underwritten by a syndicate composed of members from one country, sold principally in that country, and denominated in the currency of that country.

A *Euro-currency bank credit* is a loan in a currency which is not native to the country in which the bank office making the loan is located.

Data on *new international bond issue volume* include all publicly announced issues with an original maturity of three years or more, whether publicly or privately placed, but exclude those where the investor is a central bank, monetary authority, or government.

Data on *new Euro-currency bank credit volume* include all publicly announced loans with an original maturity of more than one year. A loan is included in the period in which the lending banks make a commitment covering the amount and terms of the loan to the borrower.

Categories of borrower

U.S. companies include both parent companies and their financing affiliates, either domestic or foreign.

Other companies include private companies domiciled outside the United States and their affiliates.

State enterprises include public agencies.

Governments include central and local governments.

Country of borrower

The country of the borrower is the residence of the borrowing entity, except where the entity is a financing vehicle, in which case the residence of the parent company and or guarantor is used.

International bond yields

Yields are calculated to the nearest day of maturity. Interest on bonds with annual coupons is discounted semiannually for comparability in computation of yield.

The yield indices are simple arithmetic averages of end-of-month secondary market yields for groups of selected straight-debt securities. Yield indices for six categories of bonds have been calculated according to borrower and currency. They are based on issues of good-quality, well-known borrowers. Occasionally the individual issues in each category are changed.

The number of issues represented in each of the indices is as follows:

Long-Term, U.S. companies, U.S. dollar — —ten Euro-bond issues.

Long-term, U.S. companies, Swiss franc — four foreign bond issues.

Long-term, European companies, U.S. dollar — ten Euro-bond issues.

Long-term, European companies, German mark — ten Euro-bond issues.

Long-term, governments, U.S. dollar — six Euro-bond issues (governments of Italy, Denmark, and France).

Euro-currency deposit rates

All data are prime banks' bid rates for deposits in London. Offer rates commonly used as a basis for Euro-dollar lending are generally .125% above bid rates.

II. Domestic markets

Day-to-day money rates

Argentina — 7-day interbank money.

Austria — day-to-day interbank rate.

Australia — approximate effective interest rate in the authorized short-term money market.

Belgium — interbank call money.

Brazil — overnight financing of Treasury bills (LTN) until November 1978. New series as of December 1979, rates paid for federal funds.

Canada — chartered banks' day-to-day loans.

Finland — Bank of Finland call money.

France — interbank call money against private paper.

Germany — interbank call money.

Hong Kong — interbank 24-hour call rate.

Ireland — interbank call money.

Italy — interbank 48 hour call money.

Japan — Tokyo interbank call money, unconditional lenders rate.

Korea — call money.

Netherlands — open-market call money.

Philippines — interbank call money.

Singapore — interbank overnight money.

South Africa — National Finance Corporation call money.

Spain — day-to-day interbank rate.

Sweden — interbank call money.

Switzerland — call money.

United Kingdom — call money.

United States — effective Federal funds rate.

Euro-dollars — prime banks' bid rate for overnight money.

Treasury bill rates

Argentina — 28-day Treasury bills.

Australia — new issues of 13-week Treasury notes.

Belgium — 3-month Treasury certificates.

Brazil — 91-day Treasury bills (LTN).

Canada — 3-month Treasury bills at tender.

Ireland — 3-month Central Bank Exchequer bills.

Italy — 6-month Treasury bills.

Japan — 60- to 62-day noninterest-bearing discount government bills.

Korea — 3-month Treasury bills until May 1981. New series as of June 1981, 1-month Treasury bills sold by Central Bank.

Mexico — 3-month Federal Treasury bills.

Netherlands — 3-month Treasury bills.

New Zealand — 3-month Treasury bills.

Philippines — 91-day Treasury bills at tender.

Singapore — 91-day Treasury bills at tender.

South Africa — 3-month Treasury bills at tender.

Spain — 3-month Treasury bills.

Sweden — new issues of 3-month Treasury bills.

United Kingdom — 91-day Treasury bills at tender.

United States — 3-month Treasury bills.

Representative money-market rates

Australia — 3-month prime finance company paper.

Belgium — 4-month Fonds des Rentes certificates.

Canada — 3-month prime finance company paper.

France — 3-month interbank money against private paper.

Germany — 3-month interbank deposits.

Hong Kong — 3-month interbank deposits.

Ireland — 3-month interbank deposits.

Italy — 3-month interbank deposits.

Japan — 3-month repurchase agreements.

Korea — 3-month financial bill.

Netherlands — 3-month interbank deposits.

New Zealand — 90-day commercial bills.

Philippines — 90-day promissory notes.

Singapore — 3-month bank acceptances.

South Africa — 90-day bank acceptances.

Spain — 1-month interbank deposits.

Switzerland — 3-month interbank deposits.

United Kingdom — 3-month interbank deposits.

United States — 3-month prime industrial paper.

Commercial bank deposit rates

Argentina — nominal 30-day time deposits. Average of bank rates published by the Central Bank.

Austria — 3-month time deposits.

Australia — 3-month certificates of deposit.

Belgium — special maximum rate for 3-month time deposits in large amounts.

Brazil — 6-month negotiable certificates of deposit of investment banks net of taxes.

Canada — 3-month time deposits.

Denmark — time deposits of 3-months' notice.

Finland — time deposits of six-month notice.

France — 3-month time deposits of FF. 1,000,000.

Germany — 3-month time deposits in large amounts.

Hong Kong — 3-month certificates of deposit. Rate set by the Hong Kong Exchange Banks' Association.

Key to data in tables — continued

Ireland — 3-month time deposits.

Italy — 3-month time deposits of Lit. 100 million or more.

Japan — 3-month time deposits until April 1979. New series as of May 1979. 90-day negotiable certificates of deposit issued by the Tokyo office of Morgan Guaranty Trust Company.

Korea — 3-month time deposits.

Mexico — 3-month certificates of deposit issued by financieras to corporations for amounts over Ps. 1 million. Higher rates available to individuals.

Netherlands — 3-month time deposits in large amounts.

New Zealand — 6-month transferable certificates of deposit.

Norway — 3-month time deposits. Higher rates may be negotiated for 12-month or more time deposits in large amounts.

Philippines — 3-month time deposits.

Singapore — 3-month certificates of deposit.

South Africa — negotiable certificates of deposit.

Spain — maximum legal rate for 3-month deposits until March 1981. New series as of April 1981. deposits over 6-months and less than 1-year for Pts. 1 million or more.

Sweden — deposits at 6-months' notice.

Switzerland — 3-month time deposits.

United Kingdom — 3-month time deposits.

United States — 3-month negotiable certificates of deposit issued by Morgan Guaranty Trust Company.

Venezuela — 6-month negotiable certificates of deposits for large amounts until December 1978. New series as of January 1979, similar rate for domestic depositors only.

Commercial bank lending rates to prime borrowers

Argentina — average rate on 30-day loans.

Austria — overdraft rate for prime borrowers, including commission.

Australia — approximate overdraft rate for prime borrowers.

Belgium — prime overdraft rate.

Brazil — weighted average investment bank lending rates.

Canada — prime rate.

Denmark — approximate rate for loans and advances to prime borrowers.

Finland — average rates on total commercial bank lending.

France — prime lending rate, excluding a commission of .05% per month on highest debit balance during the month.

Germany — approximate effective overdraft rate for prime borrowers.

Hong Kong — prime rate.

Ireland — AA corporate borrowing rate.

Italy — unsecured overdraft rate for prime borrowers.

Japan — average contracted interest rate for short-term loans of city banks. In addition, compensating balances may be required.

Korea — prime rate.

Mexico — base rate or average cost of money for banks determined monthly by the Banco de Mexico S.A.

Netherlands — overdraft rate for prime borrowers, including commission.

New Zealand — overdraft rate for prime borrowers.

Norway — overdraft rate, including a commission of .333% prior to July 1978, .25% thereafter, per quarter on the total line of credit.

Philippines — maximum legal rate, for unsecured loans exclusive of service fee.

Singapore — most common overdraft rate, major banks.

South Africa — unsecured overdraft rate for prime borrowers.

Spain — maximum legal rate for discounting commercial bills plus a commission of 1% per annum until December 1979. New series as of January 1980. preferential rate for 1-month loans calculated by the Bank of Spain.

Sweden — actual interest rate on 3-month loans to prime industrial borrowers.

Switzerland — unsecured overdraft rate for prime borrowers, excluding commission of .25% per quarter on average or highest outstanding debit balance in quarter.

United Kingdom — unsecured overdraft rate for prime borrowers.

United States — prime rate of Morgan Guaranty Trust Company. In addition, compensating balances are required.

Venezuela — representative rate for prime borrowers until December 1978. New series as of January 1979, similar rate for domestic prime borrowers only.

Domestic government bond yields

Argentina — 7% National Adjustable Bond, third series maturing in 1985, inflation adjusted by the Official Correction Index.

Austria — Austrian National Bank average yield on all outstanding government bonds.

Australia — 20-year government bonds.

Belgium — Belgian National Bank average yield on government bonds maturing in more than five years.

Canada — Bank of Canada average yield on all direct government bonds due or callable in 10 years or more.

Denmark — 10% government bond maturing 1983 until December 1977; 10% government bonds maturing 1986 until September 1980. New series as of October 1980. 12% serial bonds maturing 2001.

Finland — rate of interest at issue on central government bonds intended for public subscription, weighted by sales of bonds in the latter half of each month.

France — Institut National de la Statistique et des Etudes Economiques (INSEE) yield on public and semi-public sector bonds.

Germany — Frankfurter Allgemeine Zeitung (FAZ) 7% public authority bond average until September 1978. New series as of October 1978, FAZ 10-year public authority bond average.

Ireland — 15-year government bonds.

Italy — average of yields on six outstanding bonds of public-sector entities.

Japan — secondary market yield for the 6.1% due 1988 national government bond.

Netherlands — Central Bureau of Statistics (CBS) average yield on three latest 7% to 7.75% government bonds.

New Zealand — average yield on government bonds maturing after 10 years.

Norway — 5% government bond of 1996.

Philippines — Central Bank 5-year Certificate of Indebtedness, regular issue.

South Africa — 25-year government bonds.

Spain — 3- to 4-year government guaranteed bonds. Tax credit of 22% available to corporate and private buyers if held to maturity.

Sweden — 15-year government bonds.

Switzerland — Swiss Confederation bond average.

United Kingdom — F.T. (Financial Times) Actuaries 25-year government stock.

United States — Morgan Guaranty 20-year U.S. Government Bond Index

Venezuela — Banco Central average yield on public-sector bond issues

Domestic corporate bond yields

Australia — long-term secured debentures, indicated by Australian United Corporation.

Belgium — Belgian National Bank average yield on private corporate bonds maturing in more than five years.

Canada — McLeod, Young, Weir Co. Ltd., average yield on ten industrial bonds.

France — INSEE tax-adjusted average yield on outstanding private corporate bonds.

Germany — FAZ 6% industrial bond average until September 1978. New series as of October 1978, Bundesbank average yield on industrial bonds

Italy — average of yields of four outstanding bonds of leading Italian industrial companies.

Japan — secondary market yield for NTT bond maturing March 1987.

Korea — average of yields on 3-year corporate bonds guaranteed by local banks.

Mexico — average of yields of six outstanding Telefonos de Mexico bonds.

Netherlands — CBS average yield on three 6% to 6.5% corporate bonds.

Norway — 5.75% Dalen Portland-Cement bond of 1969-1984.

Spain — average yield for a selected group of electricity companies.

Sweden — Central Satistical Bureau average yield on industrial bonds.

Switzerland — average yield on outstanding bonds of four leading Swiss companies.

United Kingdom — F.T. (Financial Times) Actuaries 20-year debentures and loans until February 1981. New series as of March 1981, F.T. Actuaries 25-year debentures and loans.

United States — Salomon Brothers index of new issue yields for Aa industrial bonds with five-year call protection.

Venezuela — average of yields on 15-year bond issues of Electricidad de Caracas.

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